EXHIBIT 6

CAUSE NO. C-5130-16-A

JOHN PETITTA IN THE DISTRICT COURT OF §

V.

RAY R. TREY FULP III, D.O., RAY FULP ORTHOPEDICS, P.A. d/b/a SOUTH TEXAS BACK INSTITUTE AND ORTHOPEDICS, JAVIER BARBOSA, JAVIER BARBOSA, P.A., § § § VHS BROWNSVILLE HOSPITAL COMPANY, LLC d/b/a VALLEY **BAPTIST MEDICAL CENTER-**BROWNSVILLE, 3M COMPANY AND § ARIZANT HEALTHCARE, INC.

HIDALGO COUNTY, TEXAS

92nd JUDICIAL DISTRICT

PLAINTIFF'S MOTION TO COMPEL

Plaintiff seeks an order under Rule 215 compelling Defendant 3M to provide complete responses to Plaintiff's requests for production. Plaintiff's counsel attempted to resolve the dispute without court intervention, but those efforts have been unsuccessful.

BACKGROUND

As the Court is well aware, Plaintiff's case is but one of thousands of lawsuits filed by plaintiffs who suffered deep joint infections while undergoing orthopedic surgery with the use of the Bair Hugger warming device. These plaintiffs allege that while the Bair Hugger may be appropriate for most surgeries, the heated air introduced by the device

disrupts the specialized operating room ventilation system used in high-risk orthopedic surgeries.

During high-risk orthopedic procedures, the room's ultra-clean ventilation system is designed to push cool, clean air downward over the surgical site, preventing infectious particles from entering the surgical wound. Yet numerous studies conducted over the past ten years, both experimental and clinical, have demonstrated the dangerous effect the Bair Hugger has on ventilation in the operating room.

In fact, 3M admits both that the Bair Hugger blowers harbor bacteria, and that every single study confirms that the Bair Hugger increases particles over the surgical site. Even worse, 3M has long been aware of the hazard – indeed, the earliest model of the Bair Hugger specifically warned about the potential for airborne contamination in the late 1980s¹ - but actively sought to prevent further study, and dilute and disparage the results of studies conducted by others.

- 1. Monitor the patients temperature and vital signs regularly. Reduce the air temperature or discontinue therapy when normothermia is reached, or if vital sign instability occurs.
 - 2. The Bair Hugger™ is epuipped with a high temperature cutout. The OVER TEMPERATURE ALARM light will glow red and the unit will shutoff if the temperature exceeds the high temperature limit. Turn the POWER switch off and discontinue using the Heating Unit. Contact the Augustine Medical, Inc. service department.
 - 3. The patient must be dry or a net cooling effect

may occur initially.

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- 4. The patient's wounds should be covered during treatment.
- 5. The possibilty of airborne contamination should be considered if patients with infected wounds are treated with the Bair Hugger.
- 6. Explosion Hazard. Do not use in the presence of flammable anesthetics."
- 7. Electical Shock Hazard. Do not disassemble. Refer servicing to an Augustine Medical, Inc. Authorized Service Center. 1-800-733-7775

¹ Below: Photograph of warning label from earlier Bair Hugger model.

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The vast majority of the Bair Hugger lawsuits are pending in a federal consolidated proceeding, MDL. No. 15-2666, *In re Bair Hugger Forced Air Warming Products Liability Litigation*. Those cases have been partially litigated through joint general discovery, and the plaintiffs prevailed on both *Daubert* motions and summary judgment. One bellwether trial has been conducted to date.

At the same time those cases are pending, other plaintiffs have brought suit in other forums, including the instant case, in part because towards the close of written discovery in a handful of cases, Defendant 3M blamed the hospitals and medical care providers for plaintiff's infections. In this case, as in others, Plaintiff has alleged tortious behavior on the part of the hospital,² the treating orthopedic surgeon, and 3M. Defendant 3M's strategy in this case seems to be a stonewall approach to discovery by limiting its responses, denying the existence of certain materials, and refusing to produce materials because of its own failure to secure a timely protective order under Texas law. These tactics have frustrated Plaintiff's discovery efforts, requiring Court intervention.

ARGUMENT

I. 3M is Holding Production Hostage to an Untimely Demand for a Protective Order.

Obviously, the bulk of Plaintiff's document requests can be satisfied by the production of the same set of documents produced during general discovery in the MDL. There is no burden to producing the admittedly relevant MDL documents and depositions in the instant case. The MDL protective order provides that 3M should share this

² The hospital defendant settled and is no longer part of this case.

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information. Even 3M agrees in its preliminary statement to its discovery responses that "Plaintiff's allegations against 3M in this lawsuit mirror those asserted by the plaintiffs in a federal MDL..." 3M has no legitimate reason to withhold producing the documents and depositions from the MDL, but it is currently using them as a bargaining chip in attempt to obtain an improper protective order.

Under Rule 192.6, a party "may move within the time permitted for response to the discovery request for an order protecting that person from the discovery sought." 3M chose not to do so. Now, long after its response was due, ⁴ 3M is withholding the relevant discovery unless Plaintiff agrees to its untimely protective order with oppressive terms. "If a party does not move for protection or assert any applicable privileges by the thirty-day deadline for responding to the request, a failure to 'respond fully' to a request for disclosure is considered an 'abuse of the discovery process." *In re GreCon, Inc.*, 542 S.W.3d 774, 779 (Tex. App.—Houston [14th Dist.] 2018, no pet.), *quoting* Tex. R. Civ. P. 194 cmt. 1. Any discussion of a protective order by 3M is irrelevant to Plaintiff's motion to compel. 3M did not move for a protective order within the allowed time period under Texas law, and it has no basis to refuse production. As such, Plaintiff asks the Court to compel production of the MDL documents and depositions, as well as other documents responsive to the discovery requests Plaintiff served at the beginning of the year.

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³ Exhibit 1, 3M's Responses to Plaintiff's 2nd RFPs, served March 1, 2009.

⁴ Defendant's responses to Plaintiff's discovery requests were originally due in January. A short extension was provided through March 1, 2019. The parties attempted to reach agreement on the scope and nature of a protective order, but Defendants refuse any modifications to the MDL protective order, and suggested that the MDL court, rather than this court, determine disputes arising under the protective order in this case.

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II. 3M is Evading Relevant Requests for Production.

Plaintiffs asks the Court to issue an order under Rule 215 compelling 3M to fully respond to the following requests for production, each of which is reasonably calculated to lead to admissible evidence relevant to Plaintiff's claim:

REQUEST NO. 17: All litigation consulting agreements 3M or any of its representatives have entered into with any former employee of 3M or Arizant.

Although 3M has been selling the Bair Hugger for the past several years, the company's entry into the patient warming business was the result of its acquisition of Arizant Healthcare in 2010. Prior to federal consolidation, the plaintiff in the first filed lawsuit, *Walton v. 3M*, ⁵ sought to depose several former Arizant executives. The *Walton* plaintiff brought a motion for sanctions after learning that each of these witnesses had been solicited by 3M to enter into exclusive litigation contracts, provided substantial payments far above their customary compensation, and entered into restrictive agreements with 3M's attorneys under questionable circumstances. ⁶ Immediately before consolidation, the *Walton* court issued an opinion on Plaintiff's motion, which unfortunately cannot be shared as it remains under seal. ⁷ Alarming payments and improper relationships continued in another pre-consolidation lawsuit, *Johnson v. 3M*. ⁸

For these reasons, Plaintiff here requested all such "litigation consulting agreements." In its responses, 3M objected that the request "is not limited to consulting

⁵ Walton v. 3M Company, 4:13-cv-01164, U.S. District Court for the Southern District of Texas.

⁶ *Id.*, Doc. 137, Plaintiff's Motion for Sanctions

⁷ *Id.*, Doc. 193, Memorandum Opinion on Motion for Sanctions

⁸ Johnson v. 3M Company, 2-14-cv-020440-KHV-TJJ, U.S. District Court for the District of Kansas.

⁹ Exhibit 1, 3M's Responses to Plaintiff's 2nd RFPs, Request No. 17.

agreements entered into for this case," and 3M stated that "it has not entered into any litigation consulting agreement with any former employee with respect to this case." ¹⁰

3M's grossly excessive payments to their witnesses is nothing less than a bribe, and the bribing of witnesses goes to their credibility and bias. These payments and agreements are relevant in any Bair Hugger lawsuit. In addition, 3M seeks to have Plaintiff use the prior depositions of its employees in this case rather than taking new depositions. Thus, the history of improper payments to those witnesses is certainly relevant to the bias of their prior testimony. As such, the agreements are relevant and discoverable.

REQUEST NO. 18: All checks, direct deposits or other documents reflecting payments made to or on behalf of former employees for their testimony in *IN RE: Bair Hugger Forced Air Warming Products Liability Litigation*; MDL 2666, pending in the United States District Court, District of Minnesota. This would include payments for legal counsel obtained and paid for by 3M.

In response to this request, 3M claimed it "has no responsive documents." This response is inaccurate. During depositions in the MDL, 3M's former employees were represented by a Dallas law firm, and none of the witnesses testified they were paying the bills. For example, Director of Marketing Jana Stender testified that legal fees were paid on her behalf, but she did not know who was paying those bills:

- Q. Did you do a search in the marketplace and find Brewer & Associates as the attorneys that you wanted to represent you?
- A. I did not.
- Q. Okay. Who was that done by?

ia.

¹⁰ *Id*.

¹¹ Exhibit 1, 3M's Responses to Plaintiff's 2nd RFPs, Request No. 18.

- A. I don't know who selected Brewer & Associates.
- Q. It was presented to you that "We will hire these attorneys to represent you?"
- A. I was contacted by Brewer & Associates and the scenario was explained to me.
- Q. Do you understand who's paying their bills?
- A. I do not know who's paying their bills.
- Q. Are you?
- A. I am not.
- Q. Okay. You understand 3M is paying those bills; right?
- A. I do not know that, no.
- Q. You don't have any idea who's paying Brewer & Associates, you wouldn't have an educated guess on that?
- A. I do not know who's paying for it. I'm not part of that discussion, so I don't know. 12

. . .

- Q. Okay. So before being contacted by the Brewer law firm, you were not aware that you may be a potential witness in litigation.
- A. That is correct, I was not aware.
- Q. And you never have bothered to ask or inquire as to who the benefactor is that's paying for your legal fees.
- A. I did not ask. I was aware it was not me. 13

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¹² Exhibit 2, December 9, 2016 Deposition of Jana Stendar, p. 12-13.

¹³ *Id.* at 147-148.

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Plaintiff's request specifically sought payments for legal counsel. 3M's response that it has no responsive documents cannot be accurate unless the Brewer law firm undertook the *pro bono* representation of numerous former employees through MDL discovery. 3M's answer is clearly evasive.

REQUEST NO. 29. All documents that refers or relates to the Bair Hugger being contraindicated for orthopedic surgery.

In its response, 3M claims that no such documents exist, and that "the Bair Hugger system is not and never has been contraindicated by...3M for orthopedic surgeries." ¹⁴ These kinds of answers show that 3M is already using misrepresentation as a discovery tactic in this case. The truth is that 3M is well aware that it possesses internal documents responsive to this request, including several iterations of at least one document that touts a new product for being appropriate for orthopedic surgery, while acknowledging that the Bair Hugger is contraindicated.

During the summary judgment hearing, the Plaintiffs presented "an Arizant document, that came from 3M's file, dated June 23rd of 2007...regarding the Bair Paws product." As explained as the hearing:

The Bear Paws product is a forced air warming device manufactured and sold by 3M that warms a patient up and blows hot air on them before surgery. So Bear Paws is typically used before surgery, Bair Hugger during surgery.

And if you look at the advantages listed there for using the Bear Paws, warming up the patient before surgery, it says, Can be used when intraoperative warming is contra-indicated, and

¹⁴ Exhibit 1, 3M's Responses to Plaintiff's 2nd RFPs, Request No. 29.

¹⁵ Exhibit 3, Bair Hugger MDL Summary Judgment Transcript, Vol. I, at 121:2. Available at http://www.mnd.uscourts.gov/MDL-Bair-Hugger/Transcripts/2017/2017-1024-MotionsHearings-Volume-I.pdf

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then in parentheses it says, Aortic cross clamp in orthopedic cases. And that's what we're talking about here is orthopedic cases. ¹⁶

It is thus a blatant misrepresentation to claim there is no internal document which "relates to the Bair Hugger being contraindicated for orthopedic surgery."¹⁷ The Court should compel 3M to fully respond with all documents with relate to this topic.

REQUEST NO. 35. The entire due diligence file regarding the acquisition of Arizant by 3M.

Years before the Bair Hugger came to be manufactured, marketed, distributed, and sold by 3M, the product was sold by a company known as Arizant Healthcare, Inc. In 2010, 3M negotiated an acquisition of Arizant, and during the process performed a due diligence investigation, including, presumably, an evaluation of potential liabilities or risks from the Bair Hugger device. Plaintiff has requested the due diligence investigation file.

3M objects to providing its due diligence file as "overly broad, unduly burdensome, not focused on matters relevant to any party's claim or defense, and disproportionate to the needs of this case." The production of the due diligence file – a discrete collection of documents already archived by 3M – is not disproportionate or burdensome. The information is collected and stored in the normal course of business, so there is virtually no burden in its production. The file is certainly relevant the plaintiff's claims, as the information may speak to the heart of 3M's knowledge of the dangers of the Bair Hugger device.

¹⁶ *Id.*, 121:2-13.

¹⁷ Exhibit 1, 3M's Responses to Plaintiff's 2nd RFPs, Request No. 29.

¹⁸ *Id.* at Request No. 35.

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REQUEST NO. 92. All documents relating to current or planned sponsored studies regarding the Bair Hugger devices and/or forced air warming.

This request demonstrates that 3M cannot fulfill its discovery burdens by simply producing the MDL documents and depositions. 3M offered to produce the MDL materials in response to this request – if Plaintiff agrees to an untimely and oppressive protective order – but the MDL materials would not constitute a full response. The request seeks information about planned studies in the future. 3M's position in the MDL is that general discovery is complete. 3M refused to supplement its MDL discovery responses until recently ordered by the MDL Court.

However, discovery in Mr. Petitta's case is not complete. Indeed, it has barely commenced. This request seeks information that may not have been in existence when 3M first responded to general discovery in the MDL, and well as documents that for one reason or another perhaps were never produced in the MDL¹⁹. As such, Plaintiff asks the Court to compel a full response, and to order 3M to respond to all of Plaintiff's requests without limitation to MDL materials and without limitation to the end of MDL general discovery.

CONCLUSION

3M should not be permitted to hold its production hostage while it attempts to secure an untimely and improper protective order. Likewise, 3M should not be allowed to use a new lawsuit as an excuse the wildly unethical conduct towards employee witnesses in prior testimony. Finally, 3M should not be permitted to withhold relevant discovery simply because the Defendant refused to produce it in the MDL. For all these reasons, Plaintiff

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asks the Court to compel 3M to fully respond to the above requests and produce all MDL documents and depositions.

Respectfully submitted,

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Attorneys for Plaintiff

CERTIFICATE OF SERVICE

I hereby certify that I have served a true and correct copy of this *Plaintiff's Motion to Compel* upon each attorney of record via Electronic Service and the original upon the Clerk of Court via Electronic Service this 9th day of May, 2019.

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/s/ Kyle Farrar
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Hidalgo County District Clerks Reviewed By: Jonathan Coronado

CAUSE NO. C-5130-16-A

JOHN PETITTA	§ IN THE DISTRICT COURT OF
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V.	§
	§
	§ HIDALGO COUNTY, TEXAS
RAY R. TREY FULP III, D.O., RAY	§ INDAEGO COCITI, TEXAS
FULP ORTHOPEDICS, P.A. d/b/a	§
SOUTH TEXAS BACK INSTITUTE	§
AND ORTHOPEDICS, JAVIER	§ §
BARBOSA, JAVIER BARBOSA, P.A.,	8
VHS BROWNSVILLE HOSPITAL	§
COMPANY, LLC d/b/a VALLEY	§
BAPTIST MEDICAL CENTER-	§
BROWNSVILLE, 3M COMPANY AND	8
ARIZANT HEALTHCARE, INC.	§ 92nd JUDICIAL DISTRICT
	U

CERTIFICATE OF CONFERENCE

I hereby certify that Counsel for Plaintiff has conferred with counsel for Defendant in a good faith attempt to resolve this matter, but we have been unable to reach an agreement. Defendant is opposed to this motion.

/s/ Kyle W. Farrar KYLE W. FARRAR

EXHIBIT 1 PLAINTIFF'S MOTION TO COMPEL

CAUSE NO. C-5130-16-A

JOHN PETITTA,	§	IN THE DISTRICT COURT OF
	§	
v.	§	
	§	
RAY R. TREY FULP III, D.O., RAY FULP	§	HIDALGO COUNTY, TEXAS
ORTHOPEDICS, P.A. d/b/a SOUTH	§	
TEXAS BACK INSTITUTE AND	§	
ORTHOPEDICS, JAVIER BARBOSA,	§	
JAVIER BARBOSA, P.A. VHS	§	
BROWNSVILLE HOSPITAL COMPANY,	§	
LLC d/b/a VALLEY BAPTIST MEDICAL	§	
CENTER-BROWNSVILLE,	§	
3M COMPANY AND ARIZANT	§	
HEALTHCARE, INC.	§	92nd JUDICIAL DISTRICT

DEFENDANTS 3M COMPANY AND ARIZANT HEALTHCARE, INC.'S RESPONSES AND OBJECTIONS TO PLAINTIFF'S SECOND SET OF REQUESTS FOR PRODUCTION

In accordance with Rule 196 of Texas Rules of Civil Procedure, Defendants 3M Company and Arizant Healthcare Inc. (together, "3M"), by and through their counsel, submit these Responses and Objections to Plaintiff's Second Set of Requests for Production ("Requests").

PRELIMINARY STATEMENT

Plaintiff's allegations against 3M in this lawsuit mirror those asserted by the plaintiffs in a federal MDL proceeding entitled *In re Bair Hugger Forced Air Warming Devices Products Liability Litigation*, MDL 2666, which is pending in the United States District Court for the District of Minnesota. There are presently over 5,000 cases pending the Bair Hugger MDL. Extensive discovery on issues generally applicable to the cases in the Bair Hugger MDL occurred in 2016 and 2017, with some additional targeted general discovery occurring in 2018 and 2019. Plaintiffs' Co-Lead Counsel in the Bair Hugger MDL propounded more than 250

document requests through formal discovery requests, informal requests, and motions, encompassing all of the documents requested by Plaintiff here. The parties engaged in numerous in-person, telephonic, and email meet-and-confers over these requests and resolved many disputes. Those disputes that were not resolved by the parties were resolved by the Court following motion practice and argument. In all, 3M produced millions of pages of documents from the files of more than 26 current and former employees who worked in research and development, regulatory affairs, marketing, sales, and product management, as well as files and data from archives going back nearly thirty years. In a ruling on September 9, 2016, the MDL Court concluded that this custodial collection met 3M's discovery obligations. (MDL 2666, Dkt. No. 109, Order.) By the parties' agreement, keywords and computer assisted review (CAR) were also employed in identifying responsive documents. The parties also agreed upon an Electronically Stored Information (ESI) Production Protocol governing the format of production, which was approved by the Court on June 15, 2016. (MDL 2666, Dkt. No. 50.)

Given this background and the enormous effort and resources expended in the MDL on discovery, it does not make sense to "reinvent the wheel" in this case. Doing so would be grossly disproportionate to the needs of this case and would make the current case schedule and trial date unachievable. To streamline discovery, 3M proposes that the parties cooperate by utilizing the discovery already conducted in the MDL and limiting additional discovery to case-specific issues. Accordingly, even though many of the documents produced in the MDL are not relevant to this case, because they concern Bair Hugger models or time periods that are not at issue, 3M will make these documents available to Plaintiff upon entry of a protective order, notwithstanding its objections to relevance and burden.

To facilitate this kind of efficient coordination, the MDL Court entered a protective order that governed the production and provided a mechanism for sharing of the production documents in state court cases. (MDL 2666, Dkt. No. 39.) The MDL protective order recognized 3M's protectable interest in preserving the confidentiality of certain product information and trade secrets, among other materials:

The Parties assert in support of their request that protection of the identified categories of confidential information is necessary because the Parties anticipate that this action may involve discovery and production of documents and testimony that may contain confidential information, such as non-public proprietary and trade secret information, protected health information, or non-public commercial and financial data regarding the Bair Hugger system. 3M competes in the healthcare marketplace with other manufacturers of patient warming devices and related equipment. As such, 3M asserts that preservation of the company's confidential product information and trade secrets is an essential component of its business operations. Discovery and production of documents may also relate to non-public individually identifiable information related to Plaintiffs, employees or agents of 3M, or others.

(*Id.* at 2.) The MDL Protective Order permits designation of the following categories of information as confidential: "(a) trade secret information (which is a formula, pattern, device, or compilation of information which is used in one's business, and which gives the business an opportunity to obtain an advantage over competitors who do not know or use the trade secret information); (b) proprietary confidential information such as research or development information, or commercially or competitively sensitive information that would more likely than not cause competitive harm to the business operations of the producing party including, but not limited to: (i) business/strategic plans; (ii) sales, cost, and price information, including sales/financial projections; (iii) non-public marketing information; (iv) non-public detailed sales and financial data; (v) customer lists; (vi) non-public technical information; or (vii) other non-public information of competitive, financial, or commercial significance comparable to the items

listed in this subparagraph; or (c) confidential, non-public personal information concerning individuals, including but not limited to confidential health information." (*Id.* at 3.)

Recognizing the possibility of related state court litigation, the MDL protective order further provides that discovery in the MDL "shall be fully shareable with counsel litigating related cases in a different forum provided that the parties agree, or this Court determines, that a protective order with equivalent protections to this Order (including, but not limited to, protections equivalent to those in paragraphs 5, 7, and 11) has been entered in each forum." These equivalent protections include, among other things, claw-back provisions for confidential and privileged materials, limitations on who may see confidential materials, and provision for return of confidential documents at the conclusion of the litigation.

In this case, 3M has proposed a protective order with equivalent protections to the MDL Protective Order. 3M respectfully proposes that the parties agree on that order and agree generally to follow and abide by the discovery agreements and rulings in the Bair Hugger MDL. This will avoid discovery disputes and allow the focus of additional discovery to be on case-specific issues relating to Plaintiff's medical treatment and alleged injuries.

OBJECTIONS AND RESPONSES TO SPECIFIC REQUESTS

<u>REQUEST NO. 1</u>. All documents produced in IN RE: Bair Hugger Forced Air Warming Products Liability Litigation; MDL 2666, pending in the United States District Court, District of Minnesota.

RESPONSE: Upon entry of a protective order providing equivalent protections to the MDL Protective Order, 3M will make available to Plaintiff electronically the non-privileged documents that 3M, Plaintiffs, and third parties produced in the Bair Hugger MDL, except that 3M will not make available medical records and third-party productions (e.g. hospital productions) pertaining to other plaintiffs' cases. If no such protective order is entered, 3M

restates its General Objections and further objects to this request because it is overly broad, unduly burdensome, and not appropriately tailored to seek documents relevant to the specific facts and circumstances of this case.

<u>REQUEST NO. 2</u>. Provide access to all electronically stored databases of all documents produced in IN RE: Bair Hugger Forced Air Warming Products Liability Litigation; MDL 2666, pending in the United States District Court, District of Minnesota.

RESPONSE: Upon entry of a protective order providing equivalent protections to the MDL Protective Order, 3M will make available to Plaintiff electronically the non-privileged documents that 3M, Plaintiffs, and third parties produced in the Bair Hugger MDL, except that 3M will not make available medical records and third-party productions (e.g. hospital productions) pertaining to other plaintiffs' cases. If no such protective order is entered, 3M restates its General Objections and further objects to this request because it is overly broad, unduly burdensome, and not appropriately tailored to seek documents relevant to the specific facts and circumstances of this case.

<u>REQUEST NO. 3</u>. All depositions, including video and exhibits, of all current or former 3M Company and/or Arizant Healthcare Inc. employees taken in IN RE: Bair Hugger Forced Air Warming Products Liability Litigation; MDL 2666, pending in the United States District Court, District of Minnesota.

RESPONSE: Upon entry of a protective order providing equivalent protections to the MDL Protective Order, 3M will make available to Plaintiff electronically the transcripts and exhibits from the depositions of current or former employees of 3M taken in the Bair Hugger MDL. Videos will be copied and made available only at Plaintiff's expense. If no such protective order is entered, 3M restates its General Objections and further objects to this request because it is overly broad, unduly burdensome, and not appropriately tailored to seek materials relevant to the specific facts and circumstances of this case.

<u>REQUEST NO. 4</u>. All depositions, including video and exhibits, of all expert witnesses taken in IN RE: Bair Hugger Forced Air Warming Products Liability Litigation; MDL 2666, pending in the United States District Court, District of Minnesota.

RESPONSE: Upon entry of a protective order providing equivalent protections to the MDL Protective Order, 3M will make available to Plaintiff electronically the transcripts and exhibits from the depositions of expert witnesses taken in the Bair Hugger MDL. Videos will be copied and made available only at Plaintiff's expense. If no such protective order is entered, 3M restates its General Objections and further objects to this request because it is overly broad, unduly burdensome, and not appropriately tailored to seek materials relevant to the specific facts and circumstances of this case.

<u>REQUEST NO. 5</u>. All depositions, including video and exhibits, of all fact witnesses taken in IN RE: Bair Hugger Forced Air Warming Products Liability Litigation; MDL 2666, pending in the United States District Court, District of Minnesota.

RESPONSE: Upon entry of a protective order providing equivalent protections to the MDL Protective Order, 3M will make available to Plaintiff electronically the transcripts and exhibits from depositions of fact witnesses taken in the Bair Hugger MDL. Videos will be copied and made available only at Plaintiff's expense. If no such protective order is entered, 3M restates its General Objections and further objects to this request because it is overly broad, unduly burdensome, and not appropriately tailored to seek materials relevant to the specific facts and circumstances of this case.

<u>REQUEST NO. 6.</u> All documents produced in 16-CV-4187; *Gareis v. 3M Company*, pending in the United States District Court, District of Minnesota.

RESPONSE: Upon entry of a protective order providing equivalent protections to the MDL Protective Order, 3M will make available to Plaintiff electronically the non-privileged documents that 3M, Plaintiffs, and third parties produced in *Gareis*, except that 3M will not make available medical records and third-party productions (e.g. hospital productions) pertaining

to the Gareises' case. If no such protective order is entered, 3M restates its General Objections and further objects to this request because it is overly broad, unduly burdensome, and not appropriately tailored to seek documents relevant to the specific facts and circumstances of this case.

<u>REQUEST NO. 7</u>. All documents produced in 2-14-CV-020440-KHV-TJJ; *Timothy Johnson v. 3M Company*, pending in the United States District Court, District of Kansas.

RESPONSE: 3M objects to this request as duplicative of Request No. 1 and therefore unduly burdensome. 3M re-produced the same documents produced in *Johnson* in the MDL, but with a different Bates numbering system. Mr. Johnson's medical records or documents produced by Mr. Johnson are not relevant to this case and 3M will not produce them except upon agreement of Mr. Johnson's counsel.

REQUEST NO. 8. All depositions, including video and exhibits, of all current or former 3M Company and/or Arizant Healthcare Inc. employees taken in 2-14-CV-020440-KHV-TJJ; *Timothy Johnson v. 3M Company*, pending in the United States District Court, District of Kansas.

RESPONSE: Upon entry of a protective order providing equivalent protections to the MDL Protective Order, 3M will make available to Plaintiff electronically the transcripts of depositions of current or former employees of 3M taken in *Johnson*. Videos will be copied and made available only at Plaintiff's expense. If no such protective order is entered, 3M restates its General Objections and further objects to this request because it is overly broad, unduly burdensome, and not appropriately tailored to seek materials relevant to the specific facts and circumstances of this case.

<u>REQUEST NO. 9</u>. All depositions, including video and exhibits, of all expert witnesses taken in 2-14- CV-020440-KHV-TJJ; *Timothy Johnson v. 3M Company*, pending in the United States District Court, District of Kansas.

RESPONSE: No expert depositions were taken in *Johnson*.

<u>REQUEST NO. 10</u>. All depositions, including video and exhibits, of all fact witnesses taken in 2-14- CV-020440-KHV-TJJ; *Timothy Johnson v. 3M Company*, pending in the United States District Court, District of Kansas.

RESPONSE: Upon entry of a protective order providing equivalent protections to the MDL Protective Order, 3M will make available to Plaintiff electronically the transcripts and exhibits from depositions of fact witnesses taken in *Johnson*. Videos will be copied and made available only at Plaintiff's expense. If no such protective order is entered, 3M restates its General Objections and further objects to this request because it is overly broad, unduly burdensome, and not appropriately tailored to seek materials relevant to the specific facts and circumstances of this case.

<u>REQUEST NO. 11</u>. All documents produced in 4:13-CV-01164; *Tommy Walton v. 3M Company*, pending in the United States District Court for the Southern District of Texas, Houston Division.

RESPONSE: 3M objects to this request as duplicative of Request No. 1 and therefore unduly burdensome. 3M re-produced the same documents produced in *Walton* in the MDL, but with a different Bates numbering system. Mr. Walton's medical records or documents produced by Mr. Walton are not relevant to this case and 3M will not produce them except upon agreement of Mr. Walton's counsel.

<u>REQUEST NO. 12</u>. All depositions, including video and exhibits, of all current or former 3M Company and/or Arizant Healthcare Inc. employees taken in 4:13-CV-01164; *Tommy Walton v. 3M Company*, pending in the United States District Court for the Southern District of Texas, Houston Division.

RESPONSE: Upon entry of a protective order providing equivalent protections to the MDL Protective Order, 3M will make available to Plaintiff electronically the transcripts of depositions of current or former employees of 3M taken in *Walton*. Videos will be copied and made available only at Plaintiff's expense. If no such protective order is entered, 3M restates its General Objections and further objects to this request because it is overly broad, unduly

burdensome, and not appropriately tailored to seek materials relevant to the specific facts and circumstances of this case.

<u>REQUEST NO. 13</u>. All depositions, including video and exhibits, of all expert witnesses taken in 2-14- CV-020440-KHV-TJJ; 4:13-CV-01164; *Tommy Walton v. 3M Company*, pending in the United States District Court for the Southern District of Texas, Houston Division.

RESPONSE: No expert depositions were taken in *Johnson*.

<u>REQUEST NO. 14</u>. All depositions, including video and exhibits, of all fact witnesses taken in 2-14- CV-020440-KHV-TJJ; 4:13-CV-01164; *Tommy Walton v. 3M Company*, pending in the United States District Court for the Southern District of Texas, Houston Division.

RESPONSE: Upon entry of a protective order providing equivalent protections to the MDL Protective Order, 3M will make available to Plaintiff electronically the transcripts and exhibits from depositions of fact witnesses taken in *Walton*. Videos will be copied and made available only at Plaintiff's expense. If no such protective order is entered, 3M restates its General Objections and further objects to this request because it is overly broad, unduly burdensome, and not appropriately tailored to seek materials relevant to the specific facts and circumstances of this case.

<u>REQUEST NO. 15</u>. All documents and communications you provided to any other defendant regarding safety and efficacy of the Bair Hugger.

RESPONSE: 3M objects to this Request as it seeks documents protected by the attorney-client and work product doctrines as extended by the common interest doctrine.

<u>REQUEST NO. 16</u>. All communications with anyone (whether internal or external) regarding the "Reducing implant infection in orthopedics (RIIiO) pilot study."

RESPONSE: 3M will produce responsive, nonprivileged documents contained within its production of documents in the Bair Hugger MDL upon entry of a protective order providing equivalent protections to the MDL protective order. To the extent this request seeks additional documents, or such a protective order is not entered, 3M incorporates its General Objections and further objects to this request as overly broad and unduly burdensome because it seeks

documents that are irrelevant and the burden imposed on 3M is not proportionate to the benefit. The RIIiO pilot study is a third-party study occurring in the United Kingdom, and no results have been disclosed; it therefore cannot support either Plaintiff's claims or 3M's defenses.

<u>REQUEST NO. 17</u>. All litigation consulting agreements 3M or any of its representatives have entered into with any former employee of 3M or Arizant.

RESPONSE: 3M objects to this request as overly broad and unduly burdensome because it is not limited to consulting agreements entered into for this case. 3M further states that it has not entered into any litigation consulting agreement with any former employee with respect to this case. Without waiving its objections, 3M states that, upon entry of a protective order providing equivalent protections to the MDL Protective Order, 3M will make available to Plaintiff responsive documents to the extent contained within the non-privileged documents that 3M produced in the Bair Hugger MDL.

<u>REQUEST NO. 18</u>. All checks, direct deposits or other documents reflecting payments made to or on behalf of former employees for their testimony in IN RE: Bair Hugger Forced Air Warming Products Liability Litigation; MDL 2666, pending in the United States District Court, District of Minnesota. This would include payments for legal counsel obtained and paid for by 3M.

RESPONSE: 3M has no responsive documents.

<u>REQUEST NO. 19</u>. All documents relating to the International Consensus on Peri-Prosthetic Joint Infection (aka International Consensus Meeting on Musculoskeletal Infection (ICMMI)), including but not limited to 2013 and 2018.

RESPONSE: 3M will produce responsive, nonprivileged documents contained within its production of documents in the Bair Hugger MDL upon entry of a protective order providing equivalent protections to the MDL protective order. To the extent this request seeks additional documents, or such a protective order is not entered, 3M incorporates its General Objections and further objects to this request as overly broad and unduly burdensome because it seeks

documents that are irrelevant. While some portions of the ICM statements in 2013 and 2018 are relevant to the Bair Hugger litigation, others are not.

<u>REQUEST NO. 20</u>. All communications and documents exchanged with any members of the International Consensus on Peri-Prosthetic Joint Infection (aka International Consensus Meeting on Musculoskeletal Infection (ICMMI)).

RESPONSE: 3M will produce responsive, nonprivileged documents contained within its production of documents in the Bair Hugger MDL upon entry of a protective order providing equivalent protections to the MDL protective order. To the extent this request seeks additional documents, or such a protective order is not entered, 3M incorporates its General Objections and further objects to this request as overly broad and unduly burdensome because it is not limited to communications or documents relating to the issues in this case. While some of the work of the ICM in 2013 and 2018 is relevant to the Bair Hugger litigation, other work is not.

<u>REQUEST NO. 21</u>. All documents involving, discussing, or relating to the design of the Bair Hugger (all models).

RESPONSE: 3M objects to this request as overbroad, unduly burdensome, and grossly disproportionate to the needs of this case. Read literally, this request would call for the production of nearly every document in the possession, custody, or control of 3Mdiscussing the use of the Bair Hugger system, including Bair Hugger system models/units not utilized in Plaintiff's surgeries and not at issue in this case, and documents for a time period irrelevant to the claims against 3M in this case. This request is also not limited to the MDL-designated custodians. Without waiving these objections, 3M is willing to produce responsive, non-privileged documents contained within its production of documents in the Bair Hugger MDL upon entry of a protective order providing equivalent protections to the MDL protective order.

<u>REQUEST NO. 22</u>. All documents involving, discussing, or relating to the warning to be included with the Bair Hugger (all models).

RESPONSE: 3M will produce operating manuals, service manuals, instructions for use, and 510(k) submissions for the Bair Hugger units that, according to 3M's available data, were placed at Valley Baptist Medical Center – Brownsville as of date of Plaintiff's right total knee arthroplasty on November 13, 2014. 3M will also produce responsive, non-privileged documents contained within its production of documents in the Bair Hugger MDL upon entry of a protective order providing equivalent protections to the MDL protective order. To the extent this request seeks additional documents, or no such protective order is entered, 3M incorporates its General Objections and further objects as follows. 3M objects to this request as overly broad, unduly burdensome, and disproportionate to the needs of this case to the extent it seeks information about Bair Hugger system models/units not utilized in Plaintiff's surgeries and not at issue in this case and seeks documents for a time period irrelevant to the claims against 3M in this case. 3M specifically objects to the terms "involving," "discussing," and "relating" as vague and ambiguous.

<u>REQUEST NO. 23</u>. All documents involving, discussing, or relating to any change in design of the Bair Hugger (all models).

RESPONSE: 3M will produce responsive, non-privileged documents contained within its production of documents in the Bair Hugger MDL upon entry of a protective order providing equivalent protections to the MDL protective order. If no such protective order is entered, 3M restates its General Objections and further objects to this request as overly broad, unduly burdensome, and disproportionate to the needs of this case, not limited to the MDL-designated custodians, and not tailored to the matters relevant to Plaintiff's claims or 3M's defenses. As written, this request would call for the production of nearly every document in the possession, custody, or control of 3M discussing any design change, including design changes with no relevance to Plaintiff's allegations or 3M's defenses, Bair Hugger system models/units not

utilized in Plaintiff's surgeries and not at issue in this case, and documents for a time period irrelevant to the claims against 3M in this case.

<u>REQUEST NO. 24</u>. All documents that constitute the full "Design History Files" accumulated by Arizant and/or 3M, including any hazard analysis of any suspected or perceived issues with the design of the Bair Hugger (all models).

RESPONSE: 3M will produce any documents that constitute the Design History File for Bair Hugger system models in the 500 and 700 series to the extent a DHF was required for such model by 21 C.F.R. 820.30(j). 3M will also produce other responsive, non-privileged documents contained within its production of documents in the Bair Hugger MDL upon entry of a protective order providing equivalent protections to the MDL protective order. To the extent this request seeks additional documents, 3M incorporates its General Objections and further objects to this request as overly broad, unduly burdensome, and disproportionate to the needs of this case to the extent it seeks information about Bair Hugger system models/units not utilized in Plaintiff's surgeries and not at issue in this case and seeks documents for a time period irrelevant to the claims against 3M in this case.

<u>REQUEST NO. 25</u>. All documents relating to the consideration of alternative designs for the device or any of its component parts, including but not limited to filters, hoses, and blower, for the Bair Hugger (all models).

RESPONSE: 3M will produce responsive, non-privileged documents contained within its production of documents in the Bair Hugger MDL upon entry of a protective order providing equivalent protections to the MDL protective order. To the extent this request seeks additional documents, or no such protective order is entered, 3M incorporates its General Objections and further objects to this request as overly broad, unduly burdensome, and disproportionate to the needs of this case because it encompasses any consideration by any person of any change to the Bair Hugger system 500 and 700 series models for any purpose, and is not limited to 3M's consideration of alternative designs related to the filter, hose or blower. 3M also objects to this

request to the extent it seeks information about Bair Hugger system models/units not utilized in Plaintiff's surgeries and not at issue in this case and seeks documents for a time period irrelevant to the claims against 3M in this case.

<u>REQUEST NO. 26</u>. All documents that discuss "HEPA" filtration in relation to any Bair Hugger product.

RESPONSE: 3M will produce responsive, non-privileged documents contained within its production of documents in the Bair Hugger MDL upon entry of a protective order providing equivalent protections to the MDL protective order. To the extent this request seeks additional documents, or no such protective order is entered, 3M incorporates its General Objections and further objects to this request because it overly broad, unduly burdensome, and disproportionate to the needs of this case. In particular, 3M objects to this request to the extent it seeks information about Bair Hugger system models/units not utilized in Plaintiff's surgeries and not at issue in this case and seeks documents for a time period irrelevant to the claims against 3M in this case.

<u>REQUEST NO. 27</u>. All documents relating to the potential to change the inlet filtration in Bair Hugger blowers.

RESPONSE: The term "potential to change" is vague and ambiguous and therefore, for the purpose of this response, 3M construes the term to include only actual consideration by 3M of changing inlet filtration. 3M will produce responsive, non-privileged documents contained within its production of documents in the Bair Hugger MDL upon entry of a protective order providing equivalent protections to the MDL protective order. To the extent this request seeks additional documents, or no such protective order is entered, 3M incorporates its General Objections and further objects to this request because it is overly broad, unduly burdensome, and disproportionate to the needs of this case.

<u>REQUEST NO. 28</u>. All documents that reflect the issue of airborne contamination as a design consideration, including any discussions or proposals to mitigate this risk.

RESPONSE: 3M will produce any non-privileged documents reflecting the issue of airborne bacteria pathogens as a consideration for the design of the Bair Hugger system that are contained within its production of documents in the Bair Hugger MDL, upon entry of a protective order providing equivalent protections to the MDL protective order. To the extent this request seeks additional documents, or no such protective order is entered, 3M incorporates its General Objections and further objects to this request as overly broad, unduly burdensome, and disproportionate to the needs of this case because it is not limited to the MDL-designated custodians or to documents reflecting the issue of airborne pathogens as a consideration for the design of the Bair Hugger system. 3M specifically objects that the phrase "airborne contamination" is vague and ambiguous.

<u>REQUEST NO. 29</u>. All documents that refers or relates to the Bair Hugger being contraindicated for orthopedic surgery.

RESPONSE: The Bair Hugger system is not and never has been contraindicated by the FDA or 3M for orthopedic surgeries. To the extent Plaintiff means to request documents indicating that some practitioners, for whatever reason, do not use the Bair Hugger system in orthopedic surgeries, 3M will produce any such non-privileged documents contained within its production of documents in the Bair Hugger MDL upon entry of a protective order providing equivalent protections to the MDL protective order. If no such protective order is entered, 3M stands on its objection that this request is vague and ambiguous.

<u>REQUEST NO. 30</u>. All documents that refers or relates to the Bair Hugger device contaminating the sterile field.

RESPONSE: 3M will produce responsive, non-privileged documents contained within its production of documents in the Bair Hugger MDL upon entry of a protective order providing

equivalent protections to the MDL protective order. To the extent this request seeks additional documents, or no such protective order is entered, 3M incorporates its General Objections and further objects to this request as overly broad, unduly burdensome, and disproportionate to the needs of this case. 3M specifically objects that the terms "refers" or "relates" are vague and ambiguous.

<u>REQUEST NO. 31</u>. All documents that describe 3M Company's relationship with Arizant Healthcare, Inc., and any other defendant in this case.

RESPONSE: 3M states that Arizant Healthcare, Inc. was formerly a wholly owned subsidiary of 3M Company and was dissolved in 2014. To the extent this request seeks additional information or documents, 3M incorporates its General Objections and further objects to this request as overly broad, unduly burdensome, not focused on matters relevant to any party's claim or defense, and disproportionate to the needs of this case. 3M also objects that the term "relationship" is vague and ambiguous.

<u>REQUEST NO. 32</u>. All documents created by and/or provided to Defendant 3M by Defendant Arizant or from any other source prior to the acquisition by 3M of Arizant Inc. and Arizant Healthcare, Inc. regarding the contamination of the Bair Hugger and any components used with the device.

RESPONSE: 3M will produce responsive, non-privileged documents contained within its production of documents in the Bair Hugger MDL upon entry of a protective order providing equivalent protections to the MDL protective order. To the extent this request seeks additional documents, or no such protective order is entered, 3M objects to the terms "contamination of the Bair Hugger" as used in this request as vague and ambiguous. 3M further objects to this request as overly broad, unduly burdensome, not focused on matters relevant to Plaintiff's claim or defense, and disproportionate to the needs of this case to the extent it seeks information about Bair Hugger system models/units not utilized in Plaintiff's surgeries and not at issue in this case and seeks documents for a time period irrelevant to the claims against 3M in this case.

<u>REQUEST NO. 33</u>. All documents created by and/or provided to Defendant 3M by Defendant Arizant or from any other source prior to the acquisition by 3M of Arizant Inc. and Arizant Healthcare, Inc. regarding potential disruption of airflow within the operating room relating to the use of the Bair Hugger specifically or forced air warming generally.

RESPONSE: 3M will produce responsive, non-privileged documents contained within its production of documents in the Bair Hugger MDL upon entry of a protective order providing equivalent protections to the MDL protective order. To the extent this request seeks additional documents, or no such protective order is entered, 3M incorporates its General Objections and objects to this request as overly broad, unduly burdensome, and disproportionate to the needs of this case, and specifically object that the term "potential disruption of airflow within the operating room" is overly broad, vague, and ambiguous as used in this request.

<u>REQUEST NO. 34</u>. All documents created by and/or provided to Defendant 3M by Arizant or from any other source prior to the acquisition by 3M of Arizant Inc. and Arizant Healthcare, Inc. regarding any safety issues relating to the use of Bair Hugger specifically or forced air warming generally.

RESPONSE: 3M will produce responsive, non-privileged documents relating to surgical site infections or periprosthetic joint infections contained within its production of documents in the Bair Hugger MDL upon entry of a protective order providing equivalent protections to the MDL protective order. To the extent this request seeks additional documents, or no such protective order is entered, 3M incorporates its General Objections and further objects as follows: 3M objects to the phrase "safety issues" as overbroad, vague and ambiguous. 3M further objects to this request as overbroad, unduly burdensome, not tailored to matters relevant to the claims or defenses of this lawsuit, and disproportionate to the needs of this case (i) to the extent it seeks information on "safety issues" that are not related to the types of injuries alleged in Plaintiff's petition and (ii) to the extent it relates to Bair Hugger system models/units and/or other forced air warming devices not utilized in Plaintiff's surgeries and not at issue in this case.

REQUEST NO. 35. The entire due diligence file regarding the acquisition of Arizant by 3M.

RESPONSE: In addition to their General Objections, 3M objects to this request as overly broad, unduly burdensome, not focused on matters relevant to any party's claim or defense, and disproportionate to the needs of this case.

<u>REQUEST NO. 36</u>. The entire due diligence file regarding the acquisition of Augustine Medical by Arizant.

RESPONSE: 3M will produce responsive, non-privileged documents contained within its production of documents in the Bair Hugger MDL upon entry of a protective order providing equivalent protections to the MDL protective order. To the extent this request seeks additional documents, or no such protective order is entered, 3M incorporates its General Objections and objects to this request as overly broad, unduly burdensome, not focused on matters relevant to any party's claim or defense, and disproportionate to the needs of this case.

<u>REQUEST NO. 37</u>. Any documents provided to or received from Citigroup Venture Capital regarding Bair Hugger.

RESPONSE: 3M will produce responsive, non-privileged documents contained within its production of documents in the Bair Hugger MDL upon entry of a protective order providing equivalent protections to the MDL protective order. To the extent this request seeks additional documents, or no such protective order is entered, 3M incorporates its General Objections and objects to this request as overly broad, unduly burdensome, not focused on matters relevant to any party's claim or defense, and disproportionate to the needs of this case.

<u>REQUEST NO. 38</u>. Any documents provided to, and/or received from Citygroup Venture Capital regarding forced air warming.

RESPONSE: 3M will produce responsive, non-privileged documents contained within its production of documents in the Bair Hugger MDL upon entry of a protective order providing equivalent protections to the MDL protective order. To the extent this request seeks additional documents, or no such protective order is entered, 3M incorporates its General Objections and

objects to this request as overly broad, unduly burdensome, not focused on matters relevant to any party's claim or defense, and disproportionate to the needs of this case.

<u>REQUEST NO. 39</u>. Any documents provided to, and/or received from Court Square Capital Partners regarding Bair Hugger.

RESPONSE: 3M will produce responsive, non-privileged documents contained within its production of documents in the Bair Hugger MDL upon entry of a protective order providing equivalent protections to the MDL protective order. To the extent this request seeks additional documents, or no such protective order is entered, 3M incorporates its General Objections and objects to this request as overly broad, unduly burdensome, not focused on matters relevant to any party's claim or defense, and disproportionate to the needs of this case.

<u>REQUEST NO. 40</u>. Any documents provided to, and/or received from Court Square Capital Partners regarding forced air warming.

RESPONSE: 3M will produce responsive, non-privileged documents contained within its production of documents in the Bair Hugger MDL upon entry of a protective order providing equivalent protections to the MDL protective order. To the extent this request seeks additional documents, or no such protective order is entered, 3M incorporates its General Objections and objects to this request as overly broad, unduly burdensome, not focused on matters relevant to any party's claim or defense, and disproportionate to the needs of this case.

REQUEST NO. 41. Defendants' organizational charts from 1988 to the present.

RESPONSE: Upon entry of a protective order providing equivalent protections to the MDL protective order, 3M will produce responsive organizational charts for the period 2003 to 2014 for the specific businesses owned or operated by 3M that designed, tested, sold or marketed the Bair Hugger system or that were responsible for regulatory matters with respect to the Bair Hugger system that are contained within its production of documents in the Bair Hugger MDL.

To the extent this request seeks additional documents, or no such protective order is entered, 3M incorporates its General Objections and further objects as follows. 3M objects to this request as overly broad, unduly burdensome, disproportionate to the needs of this case, and not limited to a time period relevant to Plaintiff's claims. The request is not appropriately focused on the specific groups of people within 3M's businesses who have or had knowledge relevant to Plaintiff's claims or 3M's defenses.

<u>REQUEST NO. 42</u>. All documents, contracts, invoices, receipts, payments, and agreements that are in your possession, custody, or control and/or in the possession of your counsel, agents, and/or employees which mention, relate to, concern, involve, and/or pertain to any claim(s) or defense(s) you have raised or intend to raise in this case.

RESPONSE: 3M will comply with Texas Rule of Civil Procedure 190 and any pretrial disclosure requirements of the Court. Upon entry of a protective order providing equivalent protections to the MDL protective order, 3M will also produce any nonprivileged, responsive documents that are contained within its production of documents in the Bair Hugger MDL. To the extent this request seeks any additional documents beyond those 3M has agreed to produce and/or are beyond the requirements of the Texas Rules of Civil Procedure, 3M incorporates its General Objections and further objects as follows: 3M objects to this request as overly broad, unduly burdensome, not focused on matters relevant to any party's claim or defense, and disproportionate to the needs of this case. 3M specifically objects to the extent this request seeks information or encompasses documents that are attorney-client privileged, protected by the attorney work product doctrine, or some other applicable privilege. 3M also objects to this request to the extent it prematurely seeks disclosure of expert trial preparation materials.

<u>REQUEST NO. 43</u>. Produce any and all correspondence (including email), memorandum, and agreements, between or among you and any and/or all other Defendants, or you and any other person or entity, which mention, relate to, concern, and/or pertain to any claim or defense in this case.

RESPONSE: 3M will comply with Texas Rule of Civil Procedure 190 and any pretrial disclosure requirements of the Court. To the extent this request seeks any additional documents beyond the scope of the Texas Rules of Civil Procedure or any Court orders, 3M incorporates its General Objections and further objects as follows: 3M objects to this request as overly broad, unduly burdensome, not focused on matters relevant to any party's claim or defense, and disproportionate to the needs of this case. 3M specifically objects to the extent this request seeks information or encompasses documents that are attorney-client privileged (including as extended by the common interest doctrine) or protected by the attorney work product doctrine.

<u>REQUEST NO. 44</u>. Produce all manuals, guidelines, and/or teaching tools used to educate and/or train physicians, physician groups, healthcare professionals, sales representatives, technicians, your employees, independent sales contractors, and/or independent sales representatives about matters related to the Bair Hugger.

RESPONSE: 3M will produce responsive, non-privileged documents contained within its production of documents in the Bair Hugger MDL upon entry of a protective order providing equivalent protections to the MDL protective order. To the extent this request seeks additional documents, or no such protective order is entered, 3M incorporates its General Objections and further objects to this request because it is overly broad, unduly burdensome, and disproportionate to the needs of the case. As written, this request encompasses any manual, guideline, and teaching tool that relates to the Bair Hugger system in any way, and is not tailored to the issues relevant to Plaintiff's claims or 3M's defenses. 3M further objects to this request to the extent it seeks information about Bair Hugger system models not utilized in Plaintiff's surgeries and not at issue in this case.

<u>REQUEST NO. 45</u>. Produce any and all documents that mention, relate to, concern, and/or pertain to surgical site infection prevention related to the Bair Hugger.

RESPONSE: 3M will produce responsive, non-privileged documents contained within its production of documents in the Bair Hugger MDL upon entry of a protective order providing equivalent protections to the MDL protective order. To the extent this request seeks additional documents, or no such protective order is entered, 3M incorporates its General Objections and further objects to this request as overly broad, unduly burdensome, not tailored to matters relevant to the claims or defenses of the parties, and disproportionate to the needs of this case.

<u>REQUEST NO. 46</u>. Produce any document that relates to any and all occasions at any time that you, your predecessors, or any related entities (by whatever name known) became aware of allegations that a physician, nurse, and/or other healthcare provider had improperly used the Bair Hugger System and which caused complications, death, adverse effects, and/or other injury to a patient.

RESPONSE: 3M will produce reports regarding surgical site infections or periprosthetic joint infections allegedly caused by the use of the Bair Hugger system, to the extent authorized by law (see below), that are contained within its production of documents in the Bair Hugger MDL, upon entry of a protective order providing equivalent protections to the MDL protective order. To the extent this request seeks additional documents, or no such protective order is entered, 3M incorporates its General Objections and further objects as follows: 3M objects to this request because it is overly broad as to time and subject matter, unduly burdensome, and seeks information that is not relevant to the subject matter of this action, to the extent it seeks information about Bair Hugger system models/units not utilized in Plaintiff's surgeries and not at issue in this case. 3M objects to this request to the extent it seeks information relating to injuries suffered by patients that are not reasonably similar to Plaintiff's alleged injuries, or involve events not substantially similar to the allegations in Plaintiff's petition, as such information is not relevant nor proportionate to the needs of this case. 3M further objects to this request on the grounds that federal laws and regulations specifically require 3M not to disclose, including in civil discovery, the identities of patients, hospitals, or health-care professionals (or any third party) who report to 3M or the FDA serious injuries, deaths or alleged malfunctions which could lead to serious injury or death. Thus, to the extent any responsive information or documents reveal names and other patient or third-party reporting information, such information is protected from disclosure by FDA regulations. Furthermore, 3M objects that federal statutory authority and regulatory law prohibit use of such information in a civil action for any purpose. 3M further objects to this request to the extent it seeks information protected from disclosure by federal and state privacy laws, the physician-patient privilege and federal laws and regulations. Furthermore, 3M objects that information regarding product complaints is available in properly redacted format from the FDA's MAUDE database which found http://www.accessdata.fda.gov/ can he at the following web address: scripts/cdrh/cfdocs/cfMAUDE/search.CFM.

<u>REQUEST NO. 47</u>. Produce any and all documents, diagrams, memoranda, and/or graphs which reflect, reference, and/or refer to your supply chain for the Bair Hugger for the year 2000 through the present.

RESPONSE: In addition to their General Objections, 3M objects to this request as overly broad, unduly burdensome, vague and ambiguous, not tailored to matters relevant to Plaintiff's claims or 3M's defenses, and disproportionate to the needs of this case.

<u>REQUEST NO. 48</u>. Produce all of your employee handbooks, training manuals, training videos, and written policies and procedures related to marketing, sales, or use of the Bair Hugger.

RESPONSE: 3M will produce responsive, non-privileged documents contained within its production of documents in the Bair Hugger MDL upon entry of a protective order providing equivalent protections to the MDL protective order. To the extent this request seeks additional documents, or no such protective order is entered, 3M incorporates its General Objections and further objects to this request as overly broad, unduly burdensome, not focused on matters relevant to any party's claim or defense, and disproportionate to the needs of this case. 3M also

objects to this request to the extent it seeks information about Bair Hugger system models not utilized in Plaintiff's surgeries and not at issue in this case.

<u>REQUEST NO. 49</u>. Produce any and all documents that reflect any descriptive literature, promotional materials, or catalogues describing the Bair Hugger for the year 2003 through the present.

RESPONSE: 3M will produce responsive, non-privileged documents contained within its production of documents in the Bair Hugger MDL upon entry of a protective order providing equivalent protections to the MDL protective order. To the extent this request seeks additional documents, or no such protective order is entered, 3M incorporates its General Objections and further objects to this request as overly broad, unduly burdensome, not focused on matters relevant to any party's claim or defense, and disproportionate to the needs of this case because it calls on 3M to produce "any and all documents" that "reflect" any description of the Bair Hugger system for a 13-year period.

<u>REQUEST NO. 50</u>. All documents identifying all customers who purchased Bair Hugger blankets, 2000 through present.

RESPONSE: 3M objects to this request to the extent it seeks information about the identities of 3M's customers that are not relevant to any material issue in the litigation. 3M also will not produce such information for customers outside the United States, as such information is not relevant to the parties' claims or defenses. In addition to their General Objections, 3M objects to this request as overly broad, unduly burdensome, not focused on matters relevant to any party's claim or defense, and disproportionate to the needs of this case.

<u>REQUEST NO. 51</u>. All documents identifying all customers who purchased, leased, and/ or otherwise obtained Bair Hugger Temperature Management Units, 2000 through present.

RESPONSE: 3M objects to this request as overly broad, unduly burdensome, and disproportionate to the needs of this case. The identities of 3M's customers other than the hospital where Plaintiff's surgery occurred are not relevant to any material issue in this case.

Without waiving these objections, 3M is willing to produce responsive, non-privileged documents contained within its production of documents in the Bair Hugger MDL upon entry of a protective order providing equivalent protections to the MDL protective order.

<u>REQUEST NO. 52</u>. All documents reflecting any analysis or discussion of the competing products designed to provide intraoperative patient warming.

RESPONSE: 3M will produce responsive, non-privileged documents contained within its production of documents in the Bair Hugger MDL upon entry of a protective order providing equivalent protections to the MDL protective order. To the extent this request seeks additional documents, or no such protective order is entered, 3M incorporates its General Objections and further objects to this request as overly broad, unduly burdensome, not focused on matters relevant to any party's claim or defense, and disproportionate to the needs of this case, because it seeks information about products not alleged to have been utilized in Plaintiff's surgeries and not at issue in this case.

<u>REQUEST NO. 53</u>. All documents, including emails, created by Defendants regarding the Hot Dog patient warming device.

RESPONSE: 3M will produce responsive, non-privileged documents contained within its production of documents in the Bair Hugger MDL upon entry of a protective order providing equivalent protections to the MDL protective order. To the extent this request seeks additional documents, or no such protective order is entered, 3M incorporates its General Objections and further objects to this request as overly broad, unduly burdensome, not focused on matters relevant to any party's claim or defense, and disproportionate to the needs of this case because it seeks information about products not alleged to have been utilized in Plaintiff's surgeries and not at issue in this case.

<u>REQUEST NO. 54</u>. All documents concerning Dr. Scott Augustine, including but not limited to his allegations regarding the defects of the Bair Hugger Forced Air Warming System.

RESPONSE: 3M will produce non-privileged documents regarding Dr. Augustine's allegations concerning the Bair Hugger system contained within its production of documents in the Bair Hugger MDL, upon entry of a protective order providing equivalent protections to the MDL protective order. To the extent this request seeks additional documents, or no such protective order is entered, 3M incorporates its General Objections and specifically object to this request as overly broad, unduly burdensome, not focused on matters relevant to any party's claim or defense, and disproportionate to the needs of this case to the extent it seeks documents beyond those relating to Dr. Augustine's allegations concerning the Bair Hugger system.

<u>REQUEST NO. 55</u>. All documents relating to any proposed or actual communications to or from Defendants' customers, potential customers, competitors, government regulators, researchers, journalists, consultants, advisors or any other person regarding waste heat produced by Bair Hugger warming or FAW generally and the potential consequences thereof.

RESPONSE: 3M will produce non-privileged documents relating specifically to the performance of the Bair Hugger 500 series and 700 series models in relation to operating room airflow contained within its production of documents in the Bair Hugger MDL, upon entry of a protective order providing equivalent protections to the MDL protective order. To the extent Plaintiff seeks additional documents, or no such protective order is entered, 3M incorporate its General Objections and further objects to this request as vague and ambiguous, overly broad, unduly burdensome, and disproportionate to the needs of this case. 3M also specifically objects to the phrase "the potential consequences thereof" as vague and ambiguous.

<u>REQUEST NO. 56</u>. All documents relating to any proposed or actual communications to or from Defendants' customers, potential customers, competitors, government regulators, researchers, journalists, consultants, advisors or any other person regarding the contamination of Bair Hugger blowers specifically or FAW blowers generally and the potential consequences thereof.

RESPONSE: 3M will produce responsive, non-privileged documents contained within its production of documents in the Bair Hugger MDL upon entry of a protective order providing

equivalent protections to the MDL protective order. To the extent this request seeks additional documents, or no such protective order is entered, 3M incorporates its General Objections and further objects to this request as vague and ambiguous, overly broad, unduly burdensome, and disproportionate to the needs of this case. 3M also specifically objects to the phrase "potential consequences thereof" as vague and ambiguous.

<u>REQUEST NO. 57</u>. Any internal documents concerning infection risk or airborne contamination from Bair Hugger devices.

RESPONSE: 3M will produce responsive, non-privileged documents contained within its production of documents in the Bair Hugger MDL upon entry of a protective order providing equivalent protections to the MDL protective order. To the extent this request seeks additional documents, or no such protective order is entered, 3M incorporates its General Objections and further objects to this request as vague and ambiguous, overly broad, unduly burdensome, and disproportionate to the needs of the cases in the MDL. 3M specifically objects to the terms "infection risk" and "airborne contamination" as vague and ambiguous.

<u>REQUEST NO. 58</u>. All packaging, warnings, and instructions that accompany or apply to a Bair Hugger FAW.

RESPONSE: 3M will produce representative exemplars of product packaging, warnings, and instructions provided to healthcare providers with the Bair Hugger system models in the 500 and 700 series during the relevant time period. 3M objects to this request as overly broad as to time and subject matter, unduly burdensome, seeks information that is not relevant to the parties' claims or defenses, and is disproportionate to the needs of this case to the extent it seeks information about Bair Hugger system models not utilized in Plaintiff's surgeries and not at issue in this case, and/or materials never provided to or seen by Plaintiff and/or his healthcare providers prior to surgeries where a Bair Hugger system was used.

<u>REQUEST NO. 59</u>. All documents provided to Defendants sales employees describing the safety or efficacy of the Bair Hugger, including, but not limited to both pre-warming and intraoperative warming.

RESPONSE: 3M will produce responsive, non-privileged documents contained within its production of documents in the Bair Hugger MDL upon entry of a protective order providing equivalent protections to the MDL protective order. To the extent this request seeks additional documents, or no such protective order is entered, 3M incorporates its General Objections and further objects to this request because it is overly broad, unduly burdensome, seeks information that is not relevant to the parties' claims or defenses, and is disproportionate to the needs of this case. 3M specifically objects to the terms "safety" and "efficacy" in this request as overly broad, vague and ambiguous. 3M also objects to this request to the extent it seeks information concerning safety matters not related to the types of injuries alleged in Plaintiff's petition. 3M objects to this request to the extent it relates to Bair Hugger system models/units not utilized in Plaintiff's surgeries and not at issue in this case.

<u>REQUEST NO. 60</u>. All documents provided to sales representatives of Defendants regarding any allegations of defects or dangers associated with use of forced air warming, including but not limited to, allegations by Dr. Scott Augustine.

RESPONSE: 3M will produce any non-privileged responsive documents regarding Plaintiff's allegations or Dr. Augustine's allegations contained within its production of documents in the Bair Hugger MDL, upon entry of a protective order providing equivalent protections to the MDL protective order. To the extent this request seeks additional documents, or no such protective order is entered, 3M incorporates its General Objections and further objects to this request as vague and ambiguous, overly broad, unduly burdensome, and disproportionate to the needs of this case. 3M specifically objects on these bases to the extent the request seeks documents beyond those relating to Plaintiff's allegations in his petition and Dr. Augustine's

allegations concerning the Bair Hugger system. 3M further objects to the phrase "defects of forced air warming" as overly broad, vague and ambiguous.

<u>REQUEST NO. 61</u>. All documents provided to or received from anyone regarding the safety of the Bair Hugger device or the potential for airborne contamination.

RESPONSE: 3M will produce any responsive, non-privileged, relevant documents relating to benefits or alleged risks from use of the Bair Hugger system contained within its production of documents in the Bair Hugger MDL, upon entry of a protective order providing equivalent protections to the MDL protective order. To the extent this request seeks additional documents, or no such protective order is entered, 3M incorporates its General Objections and further objects to this request as vague and ambiguous, overly broad, unduly burdensome, and disproportionate to the needs of this case. 3M specifically objects that the term "safety" in this request to the extent it seeks information on safety matters that are not related to the allegations in Plaintiff's petition. 3M further specifically objects to the extent this request relates to Bair Hugger system models/units and/or other forced air warming devices not utilized in Plaintiff's surgeries and not at issue in this case. 3M also objects to the term "anyone" as vague and ambiguous and overly broad.

<u>REQUEST NO. 62</u>. All documents relating to, provided to, or received from any representative of the Surgical Care Improvement Project regarding the safety and/or efficacy of forced air warming.

RESPONSE: 3M will produce any responsive, non-privileged documents relating to benefits or alleged risks to patients from use of forced air warming systems contained within its production of documents in the Bair Hugger MDL, upon entry of a protective order providing equivalent protections to the MDL protective order. To the extent Plaintiff seeks additional documents, or no such protective order is entered, 3M incorporates its General Objections and further objects to this request as vague and ambiguous, overly broad, unduly burdensome, and

disproportionate to the needs of this case. 3M specifically objects that the term "safety" is vague and ambiguous and overbroad to the extent it seeks information on safety matters not related to the allegations in Plaintiff's petition. 3M further specifically objects to the extent this request relates to Bair Hugger system models/units and/or other forced air warming devices not utilized in Plaintiff's surgeries and not at issue in this case.

<u>REQUEST NO. 63</u>. All documents relating to, provided to, or received from any representative of ECRI regarding the safety and/or efficacy of forced air warming.

RESPONSE: 3M will produce responsive, non-privileged documents contained within its production of documents in the Bair Hugger MDL upon entry of a protective order providing equivalent protections to the MDL protective order. To the extent this request seeks additional documents, or no such protective order is entered, 3M incorporates its General Objections and further objects to this request as overly broad, unduly burdensome, and disproportionate to the needs of this case.

<u>REQUEST NO. 64</u>. All documents relating to, provided to, or received from any representative of the AORN regarding the safety and/or efficacy of forced air warming.

RESPONSE: 3M will produce responsive, non-privileged documents contained within its production of documents in the Bair Hugger MDL upon entry of a protective order providing equivalent protections to the MDL protective order. To the extent this request seeks additional documents, or no such protective order is entered, 3M incorporates its General Objections and further objects to this request as overly broad, unduly burdensome, and disproportionate to the needs of this case.

<u>REQUEST NO. 65</u>. All documents reflecting discussions between Defendants and any third party relating to infection risk potentially associated with use of Bair Hugger products.

RESPONSE: 3M will produce responsive, non-privileged documents contained within its production of documents in the Bair Hugger MDL upon entry of a protective order providing

equivalent protections to the MDL protective order. To the extent this request seeks additional documents, or no such protective order is entered, 3M incorporates its General Objections and further objects to this request as overly broad, unduly burdensome, and disproportionate to the needs of this case. 3M specifically objects to the term "any third party" as vague, overbroad, and unduly burdensome.

<u>REQUEST NO. 66</u>. All documents relating to responses or potential responses by Defendants to claims by anyone of safety risks related to Bair Hugger or forced air warming.

RESPONSE: Upon entry of a protective order providing equivalent protections to the MDL protective order, 3M will produce any non-privileged documents contained within its production of documents in the Bair Hugger MDL that relate to any investigation and/or analysis conducted by or for 3M regarding allegations that the Bair Hugger system and/or forced air warming raises the risk of surgical site infections. To the extent this request seeks any additional documents, or no such protective order is entered, 3M incorporates its General Objections and further objects to this request as overly broad, unduly burdensome, not tailored to matters relevant to the claims or defenses of the parties, and disproportionate to the needs of this case, and specifically object to the extent it relates to any alleged safety risks other than those identified in Plaintiff's petition.

<u>REQUEST NO. 67</u>. All documents relating to or referencing any article, published in a medical journal, publication, or otherwise, about the safety or efficacy of Bair Hugger in orthopedic surgery.

RESPONSE: Upon entry of a protective order providing equivalent protections to the MDL protective order, 3M will produce any non-privileged documents contained within its production of documents in the Bair Hugger MDL relating to any published article about the safety or benefits of the Bair Hugger system. To the extent this request seeks any additional documents, or no such protective order is entered, 3M incorporates its General Objections and

further objects to this request as overly broad, unduly burdensome, not tailored to matters relevant to the claims or defenses of the parties, and disproportionate to the needs of this case, and specifically object to the extent it relates to any alleged safety risks other than those identified in Plaintiff's petition.

<u>REQUEST NO. 68</u>. All medical articles or publications in Defendants' possession regarding the safety or efficacy of Bair Hugger in orthopedic surgery.

RESPONSE: 3M will produce documents sufficient to list any articles describing or identifying benefits to patients in surgeries involving hip or knee implants from the use of the Bair Hugger system. To the extent this request seeks any additional documents beyond those 3M has agreed to produce, 3M incorporates its General Objections and further objects to this request as overly broad, unduly burdensome, not tailored to matters relevant to the claims or defenses of the parties, and disproportionate to the needs of the cases in the MDL. 3M also specifically objects to the extent the request relates to any issues regarding safety or efficacy other than those alleged in Plaintiff's petition.

<u>REQUEST NO. 69</u>. All documents relating to or referencing any study or experiment about the infection rates associated with utilization of Bair Hugger in the operating room, including during any implantation surgery.

RESPONSE: Upon entry of a protective order providing equivalent protections to the MDL protective order, 3M will produce any non-privileged documents contained within its production of documents in the Bair Hugger MDL relating to any published article about the safety or benefits of the Bair Hugger system. To the extent this request seeks any additional documents, or no such protective order is entered, 3M incorporates its General Objections and further objects to this request as overly broad, unduly burdensome, not tailored to matters relevant to the claims or defenses of the parties, and disproportionate to the needs of this case.

<u>REQUEST NO. 70</u>. All documents relating to or referencing any article, published or to be published in a medical journal, medical publication, or otherwise, about the effect of the Bair Hugger on the airflow currents in an operating room.

RESPONSE: Upon entry of a protective order providing equivalent protections to the MDL protective order, 3M will produce any non-privileged documents contained within its production of documents in the Bair Hugger MDL relating to any published article about the safety or benefits of the Bair Hugger system. To the extent this request seeks any additional documents, or no such protective order is entered, 3M incorporates its General Objections and further objects to this request as overly broad, unduly burdensome, not tailored to matters relevant to the claims or defenses of the parties, and disproportionate to the needs of this case.

<u>REQUEST NO. 71</u>. All documents relating to or referencing any article, published or to be published in a medical journal, medication publication, or otherwise, about the adequacy of the Bair Hugger filtration system.

RESPONSE: Upon entry of a protective order providing equivalent protections to the MDL protective order, 3M will produce any non-privileged documents contained within its production of documents in the Bair Hugger MDL relating to any published article about the safety or benefits of the Bair Hugger system. To the extent this request seeks any additional documents, or no such protective order is entered, 3M further objects to this request as overly broad, unduly burdensome, not tailored to matters relevant to the claims or defenses of the parties, and disproportionate to the needs of this case. 3M specifically objects to the term "adequacy" as vague and ambiguous.

<u>REQUEST NO. 72</u>. All internal reports regarding the safety and/or efficacy of Bair Hugger units from 1996 to the present.

RESPONSE: 3M will produce responsive, non-privileged documents contained within its production of documents in the Bair Hugger MDL upon entry of a protective order providing equivalent protections to the MDL protective order, including complaints, if any, regarding

surgical site infections or periprosthetic joint infections alleged to follow use of the Bair Hugger system, for the relevant time period. 3M will also produce any product complaint file related to the Plaintiff. These documents will be produced to the extent authorized by law (see below).

To the extent this request seeks documents beyond those 3M has already produced, or no protective order is entered, 3M incorporates its General Objections and further objects as follows: 3M objects to this request because it is overly broad, unduly burdensome, seeks information that is not relevant to the parties' claims or defenses, and is disproportionate to the needs of this case. 3M objects to the terms "internal reports" and "safety" in this specific context as vague and ambiguous. 3M also objects to this request to the extent it seeks complaint files relating to injuries that are of a type not reasonably similar to Plaintiff's alleged injuries, or involve events not substantially similar to the events alleged in Plaintiff's petition, as such information is not relevant nor proportionate to the needs of this case. 3M further objects to this request on the grounds that federal law and regulation specifically require 3M not to disclose, including in civil discovery, the identities of patients, hospitals, or health-care professionals (or any third party) who report to 3M or the FDA serious injuries, deaths or alleged malfunctions which could lead to serious injury or death. Thus, to the extent any responsive information or documents reveal names or other identifying information of patients, hospitals, health-care professionals or any third party who reported such complaints, such information is protected from disclosure by FDA regulations.

3M objects that federal statutory authority and regulatory law prohibit use of such information in a civil action for any purpose. 3M further objects to this request to the extent it seeks information protected from disclosure by federal and state privacy laws, the physician-patient privilege and federal laws and regulations. Patient-identifying information, including

name, birth date, social security number, phone number and address will be redacted from any documents produced in response to this request. 3M objects that information regarding reported product complaints is available in properly redacted format from the FDA's MAUDE database which can be found at the following web address: http://www.accessdata.fda.gov/scripts/ cdrh/cfdocs/cfMAUDE/search.CFM.

<u>REQUEST NO. 73</u>. All documents and/or databases in your possession, custody, or control comprising or regarding any committee, task force, and/or group you created or participated in to address or handle questions or concerns related to the association or casual connection between Bair Hugger surgical site infections.

RESPONSE: 3M objects to the phrase "causal connection between Bair Hugger and contamination of the Bair Hugger" as entirely vague and ambiguous. 3M further objects to this request as overly broad and unduly burdensome to the extent it seeks production of "databases," rather than focusing on documents that are relevant to the parties' claims or defenses. Should Plaintiff clarify what he is seeking with this request, 3M will supplement its response.

<u>REQUEST NO. 74</u>. All articles or documents discussing the use of Bair Hugger in surgeries involving hip or knee implants.

RESPONSE: 3M will produce documents sufficient to list any articles describing or identifying benefits to patients in surgeries involving hip or knee implants from the use of the Bair Hugger system from the Bair Hugger MDL. To the extent this request seeks any additional documents, 3M incorporates its General Objections and further objects to this request as overbroad, unduly burdensome, disproportionate to the needs of this case, and not tailored to the matters relevant to Plaintiff's claims or 3M's defenses. 3M further specifically objects to the extent that it seeks production of all documents discussing the use of the Bair Hugger system in surgeries involving hip or knee implants. Read literally, this request would call for the production of nearly every document in the possession, custody, or control of 3M discussing the

use of the Bair Hugger system. 3M further objects to production of articles that are equally available to Plaintiff.

<u>REQUEST NO. 75</u>. All articles or documents supporting the use of Bair Hugger in surgeries involving hip or knee implants.

RESPONSE: 3M will produce documents sufficient to list any articles describing or identifying benefits to patients in surgeries involving hip or knee implants from the use of the Bair Hugger system from the Bair Hugger MDL. To the extent this request seeks any additional documents, 3M incorporates its General Objections and objects to this request as overbroad, unduly burdensome, disproportionate to the needs of this case, and not tailored to the matters relevant to Plaintiff's claims or 3M's defenses. 3M further specifically objects to the extent that it seeks production of all documents discussing the use of the Bair Hugger system in surgeries involving hip or knee implants. Read literally, this request would call for the production of nearly every document in the possession, custody, or control of 3M discussing the use of the Bair Hugger system. 3M further objects to production of articles that are equally available to Plaintiff.

REQUEST NO. 76. All documents that constitute the "Device Master Record" (DMR) for Bair Hugger models series 200, 500 and 700, including 200, 505, 750, and 775, as that term is defined in 21 CFR 820.181.

RESPONSE: Upon entry of a protective order providing equivalent protections to the MDL protective order, 3M will produce any documents that constitute the Device Master Record for Bair Hugger system models in the 500 and 700 series, to the extent a DMR was required by 21 CFR 820.181 for the applicable device and time period. To the extent Plaintiff seeks additional documents, or no such protective order is entered, 3M incorporates its General Objections and further objects to this request as overly broad as to time and subject matter, unduly burdensome, and disproportionate to the needs of this case. 3M further specifically objects to the extent this request relates to Bair Hugger system models/units and/or other forced

air warming devices not utilized in Plaintiff's surgeries and not at issue in this case.

<u>REQUEST NO. 77</u>. All documents that constitute the "Device History Record" (DHR) for Bair Hugger models series 200, 500 and 700, including 200, 505, 750, and 775, as that term is defined in 21 CFR 820.184.

RESPONSE: Upon entry of a protective order providing equivalent protections to the MDL protective order, 3M will produce any documents that constitute the Device History Record for Bair Hugger system models in the 500 and 700 series, including the 505, 750, and 775, to the extent a DHR was required by 21 CFR 820.184 for the applicable device and time period. To the extent Plaintiff seeks additional documents, or no such protective order is entered, 3M incorporates its General Objections and further objects to this request as overly broad as to time and subject matter, unduly burdensome, and disproportionate to the needs of this case. 3M further specifically objects to the extent this request relates to Bair Hugger system models/units and/or other forced air warming devices not utilized in Plaintiff's surgeries and not at issue in this case.

<u>REQUEST NO. 78</u>. All documents that constitute the "Quality System Record" (QSR) for Bair Hugger models series 200, 500 and 700, including 200, 505, 750, and 775, as that term is defined in 21 CFR 820.186.

RESPONSE: 3M will produce responsive, non-privileged documents contained within its production of documents in the Bair Hugger MDL upon entry of a protective order providing equivalent protections to the MDL protective order. To the extent Plaintiff requests additional documents, or no such protective order is entered, 3M objects to this request as vague and ambiguous, because by definition the Quality System Record is "not specific to a particular type of device(s)." 3M further objects to this request to the extent 21 CFR 820.186, and interpretation of that provision, has changed over the relevant time period. 3M also objects to this request because it is overly broad as to time and subject matter, unduly burdensome, seeks information

that is not relevant to the parties' claims or defenses, and is disproportionate to the needs of this case.

REQUEST NO. 79. All documents that constitute the "Design History File" (DHF) for Bair Hugger models series 200, 500 and 700, including 200, 505, 750, and 775, as that term is defined in 21 CFR 820.30(j).

RESPONSE: Upon entry of a protective order providing equivalent protections to the MDL protective order, 3M will produce any documents that constitute the Design History File for Bair Hugger system models in the 500 and 700 series to the extent a DHF was required for such model by 21 C.F.R. 820.30(j). To the extent Plaintiff seeks additional documents, or no such protective order is entered, 3M incorporates its General Objections and further objects to this request as overly broad as to time and subject matter, unduly burdensome, and disproportionate to the needs of this case. 3M further specifically objects to the extent this request relates to Bair Hugger system models/units and/or other forced air warming devices not utilized in Plaintiff's surgeries and not at issue in this case.

REQUEST NO. 80. All documents relating to any quality audits as defined by 21 CFR 820.22.

RESPONSE: 3M objects to this request as overly broad, unduly burdensome, not sufficiently focused on matters relevant to the parties' claims or defenses, and disproportionate to the needs of this case because it calls for production of all documents relating to any quality audit conducted at any time, for any reason. 3M further specifically objects that 3M's documents responsive to this request that predate its acquisition of Arizant are irrelevant.

<u>REQUEST NO. 81</u>. All documents relating to "procedures for implementing corrective and preventive action" as set forth in 21 CFR 820.100(a)(1–7).

RESPONSE: 3M objects to this request as overly broad, unduly burdensome, not focused on the matters relevant to the parties' claims and defenses, and disproportionate to the

needs of this case. 3M also specifically objects to this request to the extent it calls for production of 3M's documents predating its acquisition of Arizant.

<u>REQUEST NO. 82</u>. All documents containing or discussing the results of any investigation, review, or inquiry conducted or requested by you into the injuries sustained by any person as a result of the use of the Bair Hugger.

RESPONSE: 3M incorporates its responses and objections to Request Nos. 46 and 72. In addition, 3M will produce responsive, non-privileged documents contained within its production of documents in the Bair Hugger MDL upon entry of a protective order providing equivalent protections to the MDL protective order. To the extent this request seeks any additional documents, or no such protective order is entered, 3M objects to this request as overbroad, unduly burdensome, disproportionate to the needs of this case, and not tailored to the matters relevant to Plaintiff's claims or 3M's defenses.

<u>REQUEST NO. 83</u>. Any and all adverse reaction reports or similar reports concerning the care and treatment of persons using the Bair Hugger.

RESPONSE: 3M incorporates its responses and objections to Request Nos. 46 and 72. In addition, 3M will produce responsive, non-privileged documents contained within its production of documents in the Bair Hugger MDL upon entry of a protective order providing equivalent protections to the MDL protective order. To the extent this request seeks any additional documents, or no such protective order is entered, 3M objects to this request as overbroad, unduly burdensome, disproportionate to the needs of this case, and not tailored to the matters relevant to Plaintiff's claims or 3M's defenses.

<u>REQUEST NO. 84</u>. All documents relating to any FDA audit of the Defendant.

RESPONSE: Because this Request seeks documents relating to *any* FDA audit, 3M objects to this request as overbroad, unduly burdensome, disproportionate to the needs of this case, and not tailored to the matters relevant to Plaintiff's claims or 3M's defenses. Without

waiving this objection, 3M will produce responsive, non-privileged documents contained within its production of documents in the Bair Hugger MDL upon entry of a protective order providing equivalent protections to the MDL protective order.

<u>REQUEST NO. 85</u>. All documents provided to or received from the FDA regarding the potential for Bair Hugger contamination or disruption of operating theater airflow.

RESPONSE: 3M will produce the 510(k) submission and any supplemental submissions for Bair Hugger system models 505, 750, and 775. In addition, 3M will produce responsive, non-privileged documents contained within its production of documents in the Bair Hugger MDL upon entry of a protective order providing equivalent protections to the MDL protective order. To the extent this request seeks any additional documents, or no such protective is entered, 3M incorporates its General Objections and further objects to this request as overbroad, unduly burdensome, disproportionate to the needs of this case, and not tailored to the matters relevant to Plaintiff's claims or 3M's defenses. 3M objects to this request to the extent it seeks information about any Bair Hugger system model not utilized in Plaintiff's surgeries and not at issue in this case.

<u>REQUEST NO. 86</u>. All documents relating to the FDA clearance/approval process of the Bair Hugger model 200.

RESPONSE: 3M will produce the 510(k) submission and any supplemental submissions for Bair Hugger system model 200. In addition, 3M will produce responsive, non-privileged documents contained within its production of documents in the Bair Hugger MDL upon entry of a protective order providing equivalent protections to the MDL protective order. To the extent this request seeks any additional documents, or no such protective is entered, 3M incorporates its General Objections and further objects to this request as overbroad, unduly burdensome, disproportionate to the needs of this case, and not tailored to the matters relevant to Plaintiff's claims or 3M's defenses. 3M objects to this request to the extent it seeks information

about any Bair Hugger system model not utilized in Plaintiff's surgeries and not at issue in this case.

<u>REQUEST NO. 87</u>. All documents provided to and/or received from the FDA regarding any Bair Hugger Model.

RESPONSE: 3M will produce responsive, non-privileged documents contained within its production of documents in the Bair Hugger MDL upon entry of a protective order providing equivalent protections to the MDL protective order. To the extent this request seeks any additional documents, or no such protective order is entered, 3M incorporates its General Objections and further objects to this request as overly broad as to time and subject matter, unduly burdensome, and disproportionate to the needs of this case because many responsive documents have no relevance to Plaintiff's allegations or 3M's defenses. 3M specifically objects to the extent this request relates to Bair Hugger system models/units and/or other forced air warming devices not utilized in Plaintiff's surgeries and not at issue in this case.

<u>REQUEST NO. 88</u>. All documents relating to any device identified as "substantially equivalent" in any Bair Hugger 510k submission.

RESPONSE: 3M objects to this request as overly broad, unduly burdensome, and disproportionate to the needs of this case because many responsive documents have no relevance to Plaintiff's allegations or 3M's defenses. The phrase "in any Bair Hugger 510k submission" is so broad that this request encompasses Bair Hugger system models/units not utilized in Plaintiff's surgeries and not at issue in this case.

<u>REQUEST NO. 89</u>. All documents, videos, photographs, relating to the testing of the Bair Hugger device.

RESPONSE: In the Bair Hugger MDL, 3M provided Plaintiffs' Co-Lead Counsel with a list of testing related to the Bair Hugger system and Plaintiff identified tests to be produced. Those test documents are included in 3M's MDL production and 3M will produce them in this

case upon entry of a protective order providing equivalent protections to the MDL protective order. To the extent this request seeks documents beyond those documents 3M produced in the Bair Hugger MDL, or no such protective order is entered, 3M incorporates its General Objections and further objects to this request as overly broad, unduly burdensome, and disproportionate to the needs of this case because many tests relating to the Bair Hugger system have no relevance to Plaintiff's allegations or 3M's defenses.

<u>REQUEST NO. 90</u>. All documents relating to any calculations, suggested and/or made, to determine any effect on the operating room environment related to the Bair Hugger device.

RESPONSE: 3M will produce responsive, non-privileged documents contained within its production of documents in the Bair Hugger MDL upon entry of a protective order providing equivalent protections to the MDL protective order. To the extent this request seeks any additional documents, or no such protective order is entered, 3M incorporates its General Objections and further objects to this request as overly broad, unduly burdensome, and vague and ambiguous. The phrase "effect on the operating room environment" is so broad that this request encompasses any calculations of any kind concerning patient warming. The request should be limited to the specific issues alleged in Plaintiff's petition.

<u>REQUEST NO. 91</u>. All documents relating to studies of the Bair Hugger devices, including sponsored, proposed, attempted, and/or completed studies.

RESPONSE: 3M will produce responsive, non-privileged documents contained within its production of documents in the Bair Hugger MDL upon entry of a protective order providing equivalent protections to the MDL protective order. To the extent this request seeks any additional documents, or no such protective order is entered, 3M incorporates its General Objections and further objects to this request as overly broad, unduly burdensome, and disproportionate to the needs of this case because not all studies of the Bair Hugger devices are

relevant to the issues in the case, and not all documents relating to studies are relevant. 3M further objects to this Request to the extent it seeks publicly available information.

<u>REQUEST NO. 92</u>. All documents relating to current or planned sponsored studies regarding the Bair Hugger devices and/or forced air warming.

RESPONSE: 3M will produce responsive, non-privileged documents contained within its production of documents in the Bair Hugger MDL upon entry of a protective order providing equivalent protections to the MDL protective order. To the extent this request seeks any additional documents, or no such protective order is entered, 3M incorporates its General Objections and further objects to this request as overly broad, unduly burdensome, and disproportionate to the needs of this case because not all studies of the Bair Hugger devices are relevant to the issues in the case, and not all documents relating to studies are relevant. 3M further objects to this Request to the extent it seeks publicly available information.

<u>REQUEST NO. 93</u>. All documents relating to research regarding the Bair Hugger and/or forced air warming.

RESPONSE: 3M will produce responsive, non-privileged documents contained within its production of documents in the Bair Hugger MDL upon entry of a protective order providing equivalent protections to the MDL protective order. To the extent this request seeks any additional documents, or no such protective order is entered, 3M incorporates its General Objections and further objects to this request to this request as overly broad, unduly burdensome, not tailored to matters relevant to the claims or defenses of the parties, and disproportionate to the needs of this case.

<u>REQUEST NO. 94</u>. All documents relating to any investigation and/or analysis conducted by or for Defendants regarding allegations of any sort that Bair Hugger and/or forced air warming creates safety risks for surgical patients.

RESPONSE: Upon entry of a protective order providing equivalent protections to the MDL protective order, 3M will produce responsive, non-privileged documents contained within

its production of documents in the Bair Hugger MDL that relate to any investigation and/or analysis conducted by or for 3M regarding allegations that the Bair Hugger system and/or forced air warming raises the risk of surgical site infections. To the extent this request seeks any additional documents, or no such protective order is entered, 3M incorporates its General Objections and further objects to this request as overly broad, unduly burdensome, not tailored to matters relevant to the claims or defenses of the parties, and disproportionate to the needs of this case to the extent it seeks documents relating to any purported "safety risks" other than those identified in Plaintiff's petition. 3M also specifically objects that the phrase "allegations of any sort" is overly broad, vague, and ambiguous.

<u>REQUEST NO.95</u>. All documents, including videos, relating to the potential effect of vented/waste heat from Bair Hugger devices in an actual and/or simulated operating room.

RESPONSE: Upon entry of a protective order providing equivalent protections to the MDL protective order, 3M will produce responsive, non-privileged documents contained within its production of documents in the Bair Hugger MDL. To the extent this request seeks additional documents, 3M incorporates its General Objections and further objects to this request as overly broad, unduly burdensome, and disproportionate to the needs of this case. 3M also objects to the phrase "waste heat" as vague and ambiguous.

<u>REQUEST NO. 96</u>. All documents relating to any research, experiments, or tests conducted by or for Defendants regarding potential contamination of the airflow paths of Bair Hugger, the creation of convection currents in the operating room, and/or any other safety concern.

RESPONSE: Upon entry of a protective order providing equivalent protections to the MDL protective order, 3M will produce responsive, non-privileged documents contained within its production of documents in the Bair Hugger MDL. To the extent this request seeks additional documents, or such a protective order is not entered, 3M incorporates its General Objections and further objects to this request as overly broad, unduly burdensome, and disproportionate to the

needs of the cases in the MDL. 3M also specifically objects to the terms "airflow paths of Bair Hugger," "convection currents," and "any other safety concern" as overly broad, vague, and ambiguous.

<u>REQUEST NO. 97</u>. All documents or emails concerning Hybeta in Amersfoort, including but not limited to, all communications with Hybeta.

RESPONSE: Upon entry of a protective order providing equivalent protections to the MDL protective order, 3M will produce responsive, non-privileged documents contained within its production of documents in the Bair Hugger MDL. To the extent this request seeks additional documents, or such a protective order is not entered, 3M incorporates its General Objections and further objects to this request as overly broad, unduly burdensome, not reasonably limited to the matters relevant to the parties' claims and defenses, and disproportionate to the needs of this case.

<u>REQUEST NO. 98</u>. The analysis or interpretation of data compiled by Defendants regarding the study conducted by Hybeta in Amersfoort in the Netherlands.

RESPONSE: Upon entry of a protective order providing equivalent protections to the MDL protective order, 3M will produce responsive, non-privileged documents contained within its production of documents in the Bair Hugger MDL. To the extent this request seeks additional documents, or such a protective order is not entered, 3M incorporates its General Objections and further objects to this request to the extent it seeks publicly available information, and is overly broad, unduly burdensome, and disproportionate to the needs of this case.

<u>REQUEST NO. 99</u>. Internal reports from unpublished airflow studies conducted in the Netherlands that studied airflow in an operating room setting, including over patients and around operating room tables.

RESPONSE: Upon entry of a protective order providing equivalent protections to the MDL protective order, 3M will produce responsive, non-privileged documents contained within its production of documents in the Bair Hugger MDL. (3M construes the phrase "internal"

reports" to mean reports internal to 3M.) To the extent this request seeks additional documents, or such a protective order is not entered, 3M incorporates its General Objections and further objects to this request as overly broad, unduly burdensome, and disproportionate to the needs of this case.

<u>REQUEST NO. 100</u>. All documents regarding any epidemiological studies considered and/or performed by Defendants regarding infections caused by forced air warming.

RESPONSE: Upon entry of a protective order providing equivalent protections to the MDL protective order, 3M will produce responsive, non-privileged documents contained within its production of documents in the Bair Hugger MDL. To the extent this request seeks additional documents, or such a protective order is not entered, 3M incorporates its General Objections and further objects to this request as overly broad, unduly burdensome, and disproportionate to the needs of this case. In responding to this request or any other request, 3M does not admit (and specifically deny) that forced air warming causes surgical site infections.

<u>REQUEST NO. 101</u>. All documents regarding any epidemiological studies considered and/or performed by Defendants regarding increased particles over the surgical site caused by forced air warming.

RESPONSE: Upon entry of a protective order providing equivalent protections to the MDL protective order, 3M will produce responsive, non-privileged documents contained within its production of documents in the Bair Hugger MDL. To the extent this request seeks additional documents, or such a protective order is not entered, 3M incorporates its General Objections and further objects to this request as overly broad, unduly burdensome, and disproportionate to the needs of this case.

<u>REQUEST NO. 102</u>. All documents regarding any studies performed by Defendants, their predecessors, and/or third parties that concern infection rates potentially associated with use of any other type of patient warming systems, including fabric blankets, conductive blankets, or other types of forced air warming.

RESPONSE: Upon entry of a protective order providing equivalent protections to the MDL protective order, 3M will produce responsive, non-privileged documents contained within its production of documents in the Bair Hugger MDL. To the extent this request seeks additional documents, or such a protective order is not entered, 3M incorporates its General Objections and further objects to this request as overly broad, unduly burdensome, and disproportionate to the needs of this case. 3M objects to the extent Plaintiff has equal access to such documents concerning third-party testing of other manufacturers' devices.

<u>REQUEST NO. 103</u>. Produce any and all tests and/or trials, including set-up documents, protocols, videotapes of testing, analysis of tests, summaries of tests, and/or test results themselves, conducted to evaluate the safety, efficacy, and/or performance of the Bair Hugger devices since its development by you or sponsored by you.

RESPONSE: In the Bair Hugger MDL, 3M provided Plaintiff's counsel with a list of testing related to the Bair Hugger system and Plaintiff identified tests to be produced. Those test documents are included in 3M's MDL production and 3M will produce them in this case upon entry of a protective order providing equivalent protections to the MDL protective order. To the extent this request seeks documents beyond those documents 3M produced in the Bair Hugger MDL, or no such protective order is entered, 3M incorporates its General Objections and further objects to this request as overly broad, unduly burdensome, and disproportionate to the needs of this case because many tests relating to the Bair Hugger system have no relevance to Plaintiff's allegations or 3M's defenses.

<u>REQUEST NO. 104</u>. All documents regarding any studies performed by Defendants, their predecessors, or third parties using computational fluid dynamics to model the effects of the Bair Hugger System in an operating room.

RESPONSE: Upon entry of a protective order providing equivalent protections to the MDL protective order, 3M will produce responsive, non-privileged documents contained within its production of documents in the Bair Hugger MDL, and will produce the MDL expert report

of Dr. John Abraham and the transcript of Dr. Abraham's MDL deposition testimony. To the extent this request seeks additional documents, or such a protective order is not entered, 3M incorporates its General Objections and further objects to this request as overly broad, unduly burdensome, and disproportionate to the needs of this case. 3M objects to the extent Plaintiff has equal access to such documents concerning third-party computational fluid dynamics modeling.

GENERAL OBJECTIONS

3M makes Specific Objections to each separate Request in its responses above. 3M also make the following General Objections and incorporate them by reference to avoid the wasteful exercise of repeating the same objections for each Response.

- 1. 3M objects to the Requests because they duplicate document requests served by Plaintiffs' Co-Lead Counsel in the Bair Hugger MDL. As discussed above, the parties engaged in an extensive meet and confer concerning these requests, orders governing 3M's production were entered by the MDL Court, and 3M produced a large quantity of responsive documents. Once a protective order is entered providing equivalent protections to the MDL Protective Order, 3M will make available to Plaintiff its production from the Bair Hugger MDL, as set forth above. Requiring 3M to respond to 104 duplicative requests in this case is unduly burdensome, unnecessary, and disproportionate to the needs of the case.
- 2. 3M objects to collecting and reviewing documents from custodians and custodial sources beyond those it collected in the Bair Hugger MDL, other than as necessary to produce case-specific documents relating to 3M's placement of the Bair Hugger patient warming system at Valley Baptist Medical Center Brownsville. Any additional custodial collection would be unduly burdensome and disproportionate to the needs of this case.
- 3. 3M does not in any way adopt Plaintiff's purported definitions of words and phrases, and reserve the right to object to them to the extent they are inconsistent with either

- (i) the definitions set forth by 3M where applicable; (ii) the definitions set out in relevant statutes, regulations, or guidance; or (iii) the ordinary and customary meaning of the terms.
- 4. 3M objects to the definitions set forth or used in Plaintiff's Requests to the extent they are overly broad, vague, misleading, erroneous, or seek to define terms in a manner inconsistent with federal regulations or their implementing rules.
- 5. 3M objects to the definition of "Bair Hugger" as vague, ambiguous, overbroad and unduly burdensome to the extent it is intended to include medical devices other than the Bair Hugger model used in Plaintiff's November 13, 2014 surgery, and to the extent it seeks information not in 3M's possession, custody, or control. For the sake of clarity, 3M's answers and responses refer to the "Bair Hugger system," which is meant to include only the Bair HuggerTM system 505, 750, and 775 models.
- 6. 3M objects to Plaintiff's Requests to the extent they call for disclosure of information that is protected by the attorney-client privilege, the attorney work product doctrine, or other applicable privileges, immunities, or exemptions, or contractual confidentiality provisions.
- 7. 3M objects to producing confidential information or documents of persons who are not parties to this action, and/or that are protected from disclosure pursuant to the patient/physician privilege relationship and/or federal or state authority and regulatory law including, without limitation, the Health Insurance Portability and Accountability Act of 1996 (HIPAA), 45 C.F.R. § 164.500, et seq.
- 8. 3M objects to the Requests to the extent the information and documents sought are protected from discovery pursuant to 21 C.F.R. § 20.63(f), which prohibits a manufacturer from disclosing identifying information regarding reports or other persons associated with an

adverse event report, and 21 U.S.C. § 360i(b)(3), which provides device user reports shall not be admissible into evidence or otherwise used in any civil action involving private parties. *See also, In re Medtronic*, 194 F. 3d 807 (8th Cir. 1999).

- 9. 3M objects to the definitions of "You," "Your," "Defendant," and "Defendants" as overbroad to the extent they purport to impose obligations on 3M to produce documents that are not in its possession, custody, or control.
- 10. 3M objects to the use of the words "any" and "all" in Plaintiffs' requests as being, in many instances, overbroad and too encompassing to permit literal compliance. In providing responses to the MDL Plaintiffs' requests and Plaintiff's Requests here, 3M has undertaken a reasonable effort to locate documents and to provide information. 3M's investigation is continuing, and 3M's responses are based upon such information as is reasonably available to 3M and susceptible to retrieval through reasonable effort.
- 11. 3M objects to the Requests to the extent they seek documents that are publicly available.
- 12. 3M objects to the Requests to the extent they seek information or documents that go beyond the scope of the allegations set forth in Plaintiff's Petition.
- 13. To the extent that 3M states that it "will produce" or "make available" documents in response to any request, 3M does not admit that there exist documents responsive to the request. Rather, 3M will undertake a reasonable effort to locate documents within its possession, custody or control and to provide information responsive to the request.
- 14. To the extent any request seeks confidential business and proprietary information, trade secrets, other confidential business, financial or otherwise commercially sensitive or commercially competitive information and documents, or information that 3M is required to treat

as confidential pursuant to contract, law or agreement with state and/or federal authorities, 3M objects to the production or disclosure of any such information prior to the entry of an appropriate protective order, and in particular, a protective order providing equivalent protections to the MDL Protective order.

- 15. 3M objects to the Requests to the extent they seek confidential information regarding persons who are not parties to this action and/or that is protected from disclosure pursuant to the attorney-client privilege and attorney work product doctrine.
- 16. These General Objections are applicable to, and incorporated in, each of 3M's responses as if specifically set forth therein. The stating of specific objections to a particular request shall not be construed as a waiver of 3M's General Objections. Nor does the restatement of or specific reference to a General Objection in the response to a particular discovery request waive any other General Objection. Additionally, unless otherwise specifically stated, 3M's objections to each discovery request apply to the entire request, including each and every subpart of the request.
- 17. 3M's responses to these Requests are made subject to, and without waiving, or intending to waive, any of the objections noted above, and 3M also do not waive:
- a. Any questions as to competency, relevancy, materiality, privilege, and admissibility as evidence for any purpose of any of the documents referred to or responses given, or the subject matter thereof in any subsequent proceeding in, or any trial of, this action or any other action or proceeding;
- b. The right to object to other discovery procedures involving or relating to the subject matter of the discovery requests answered or responded to herein; or

c. The rights at any time to revise, correct, add to, or clarify any of the answers or responses set forth herein.

Dated: March 1, 2019

Respectfully submitted,

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ATTORNEYS FOR DEFENDANTS 3M COMPANY AND ARIZANT HEALTHCARE INC.

CERTIFICATE OF SERVICE

I do hereby certify that a true and correct copy of the foregoing instrument was delivered to all counsel of record in accordance with the Texas Rules of Civil Procedure on this the 1st day of March, 2019.

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/s/ Deborah E. Lewis
Deborah E. Lewis

EXHIBIT 2 PLAINTIFF'S MOTION TO COMPEL

CONFIDENTIAL

Page 12
1 A. One hundred and ninety-five dollars.
2 Q. Is that the amount that you're going to be
3 charging them for your time in preparing for your
4 deposition?
5 MS. GASE: Object to the form.
A. That is the amount I will be sending to
7 Brewer & Associates. I don't know where it goes from 8 there, but to Brewer & Associates.
9 Q. Did you select Brewer & Associates as your
10 attorneys to represent you?
11 A. I did at the point of that offer, yes.
Q. Okay. Let me ask you this: Did you do a
search in the marketplace and find Brewer & Associates
as the attorneys that you wanted to represent you?
15 A. I did not.
Q. Okay. Who was that done by?MS. GASE: Objection, form.
18 A. I don't know who selected Brewer &
19 Associates.
Q. It was presented to you that "We will hire
21 these attorneys to represent you?"
MS. GASE: Objection, form.
A. I was contacted by Brewer & Associates and
the scenario was explained to me.
Q. Do you understand who's paying their bills?

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C O N F I D E N T I A L

	Page 13	
1	A. I do not know who's paying their bills.	
2	Q. Are you?	
3	A. I am not.	
4	Q. Okay. You understand 3M is paying those	
5	bills; right?	
6	MS. GASE: Objection, form.	
7	A. I do not know that, no.	
8	Q. You don't have any idea who's paying Brewer	
9	& Associates, you wouldn't have a an educated guess	
10	on that.	
11	MS. GASE: Objection, form, asked and	
12	answered, calling for speculation.	
13	A. I do not know who's paying for it. I'm not	
14	part of that discussion, so I don't know.	
15	Q. Could just be some random guy in this	
16	building is paying those bills.	
17	MS. GASE: Objection, form.	
18	A. I don't know.	
19	Q. Have you ever seen a bill from them?	
20	A. From?	
21	Q. Brewer & Associates.	
22	A. I have not seen a bill from Brewer &	
23	Associates.	
24	Q. How much time did you spend preparing for	
25	the deposition?	

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C O N F I D E N T I A L

Page 145	Page 147
	1 called you out of the blue and said, "We'll represent
	2 you for free."
	3 MS. GASE: Objection. To the extent that
	4 you're revealing substances of conversations between
	5 the Brewer firm and Ms. Stender, I would direct you
	ļ
	6 not to answer with respect to the specifics of that 7 conversation.
	8 Q. Let me ask it a different way. You hired
	9 the Brewer law firm because they called you; correct?
	MS. GASE: Objection, form, mischaracterizes
	11 previous testimony.
	12 A. I didn't specifically hire them, but I was
	contacted by them, yes. I was apprised that I would
	be part of these proceedings.
	Q. Apprised by that law firm, or before that
	16 you were apprised?
	17 A. By the law firm.
	Q. Okay. So before being contacted by the
	Brewer law firm, you were not aware that you may be a
	20 potential witness in litigation.
	A. That is correct, I was not aware.
	Q. And you never have bothered to ask or
	23 inquire as to who the benefactor is that's paying for
	24 your legal fees.
	25 MS. GASE: Objection, form.
Page 146	Page 148
Page 146	Page 148 1 A. I did not ask. I was aware it was not me.
Page 146	

EXHIBIT 3 PLAINTIFF'S MOTION TO COMPEL

1		
1	UNITED STATES DISTRICT COURT	
2	DISTRICT OF MINNESOTA	
3		
4	In Re: Bair Hugger Forced Air) File No. 15-MD-2666	
5	Warming Devices Products) (JNE/FLN) Liability Litigation)	
6) October 24, 2017) Minneapolis, Minnesota	
7) Courtroom 12W) 9:04 a.m.	
8))))	
9		
10	BEFORE THE HONORABLE JOAN N. ERICKSEN UNITED STATES DISTRICT COURT JUDGE	
11	THE HONORABLE FRANKLIN L. NOEL	
12	UNITED STATES MAGISTRATE JUDGE	
13	THE HONORABLE WILLIAM H. LEARY RAMSEY COUNTY DISTRICT COURT JUDGE	
14	RAMSEI COUNTI DISTRICI COURT GODGE	
15	(MOTIONS HEARING- VOLUME I)	
16	<u>APPEARANCES</u>	
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25		Minneapolis, Minnesota 55415

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1
                          PROCEEDINGS
 2
           (9:04 \text{ a.m.})
 3
                 THE COURT: You have to forgive Patrick. He just
 4
       found out this morning that he passed the bar, so we're the
 5
       least of his worries.
 6
                 Welcome. And let's just get right to it. Why
 7
       don't we start with the opening statements. Defendant?
 8
                 JUDGE LEARY: Judge Ericksen, if I could just
 9
       clarify for the record that it is the understanding and the
10
       agreement that this is a joint session of the United States
11
       District Court as well as Ramsey County District Court
12
       Second Judicial District. If there's any -- if I'm wrong in
13
       that regard, somebody needs to speak up.
14
                 MS. ZIMMERMAN: No, Your Honor, we agree.
15
                 MR. BLACKWELL: Your Honor, you are right in that
16
       regard.
17
                 JUDGE LEARY: Okay. Thank you.
18
                 THE COURT: And I agree. Thanks very much.
19
       Mr. Blackwell, ready to hear from you.
20
                 MR. BLACKWELL: Thank you, Your Honor.
21
                 Good morning, Your Honors, counsel. Your Honors,
22
       the Seventh Circuit perhaps said it best and as well as In
23
       Re Bausch & Lomb MDL court, the courtroom is not the forum
24
       to advance new scientific theories, noting that "the
25
       courtroom is not the place for scientific quesswork, even of
```

the inspired sort. Law lags science; it does not lead it."

I'm speaking this morning on behalf of 3M whose product, the Bair Hugger, the plaintiffs have claimed causes prosthetic joint infections. While the FDA and the many health and patient organizations inside and outside the country that have weighed in on this have expressly rejected that theory, not one epidemiology study has reached that conclusion, not one clinical trial has reached that conclusion; all are against it. Not one biological plausibility study supports that theory; all are against it.

Plaintiffs' own studies, their own reliant studies, failed to reach the conclusion that the Bair Hugger causes surgical site or prosthetic joint infections. The 3M Bair Hugger has successfully warmed over 200 million patients, 50 thousand patients a day. And to this very day, not one treating physician has ever contacted 3M or the FDA to say that they have a patient with a prosthetic joint infection that was caused by the Bair Hugger.

So we say that 3M's -- that the plaintiffs' theory is a novel theory. It is novel not only because it is not generally accepted in the scientific and medical community; it is novel because it has been expressly considered and repeatedly rejected in the scientific and medical communities. Not one valid scientific study reaches the conclusion that the Bair Hugger causes prosthetic joint

infections, not even the plaintiffs' own studies, and plaintiffs' experts here have not conducted even one study of their own that reaches a different conclusion.

This is litigation science, plain and simple, promoting a novel scientific theory of the Bair Hugger causing infections when it's unsupported and uniformly rejected outside of litigation in the so-called real world. Why in the world would this Court want to give speculative science, these Courts give speculative science to a jury to reach a scientific conclusion that stands rejected by both the FDA and the weight of the whole scientific and medical communities? What purpose would that serve? And what kind of chaos and confusion would that create in the scientific and medical communities for doctors and patients alike? That would be the epitome of the law leading the science and not lagging it.

This should not be such a thing as litigation science that stands out front and in stark contrast to the general accepted science in the real world. Plaintiffs have to have science outside of litigation, testing the end point of whether the Bair Hugger causes surgical site infections or prosthetic joint infections and finding that it in fact does. They do not.

Scientific theories that have only been considered in the general scientific community, considered and rejected

in the general scientific community, automatic never to go to a jury for the purpose of establishing counter propositions or to reach findings that go beyond the peer-reviewed studies. Your Honors should be extremely skeptical about a so-called science generated for the first time in litigation and equally skeptical of any litigation attempts to, in quotes, blue pencil or re-characterize the current body of the scientific evidence to recast it as somehow supportive of causation when they expressly said that it isn't.

And to be clear, Your Honors, this is not a weight versus admissibility issue that's at stake here. For there to be a weight versus admissibility issue, there must be something that constitutes weight under Rule 702. Under Glastetter, that weight must be scientifically valid proof of causation in order for that to get to a jury. Generally rejected scientific theories should not constitute weight. Reliant studies that expressly and uniformly do not find a causal relationship between the Bair Hugger and infections should not constitute weight. Causation theories that live and breathe only in litigation expressed by litigation experts who have never publicly expressed those opinions anywhere else should not be weighed. If the best that can be said of the plaintiffs' scientific theory is that it is generally not supported by the scientific community, that

has to be the virtual near opposite of valid scientific proof of causation in fact. No general acceptance in the peer-reviewed literature and no general acceptance in the medical community should equal no weight, should equal no admissibility.

The science upon which the plaintiffs' scientific or medical case relies is unreliable, inherently unreliable, because it is litigation driven, litigation created, has been uniformly rejected in the scientific community outside of this court, and it has severe methodological flaws to the extent it is resting overwhelmingly on the McGovern study and I'll also say the Augustine 2017 study.

And so why this is so important, Your Honor, is as the Court said in a different MDL, In Re Lipitor, because expert witnesses have the potential to be both powerful and quite misleading, "It is crucial that the District Court conduct a careful analysis into the reliability of the expert's proposed opinion." Wonderful opinion that's in many respects on all fours with this case, In Re Lipitor.

I want to tee up for just a second this issue of biological plausibility. The general causation question here is whether the Bair Hugger causes prosthetic joint infections, not whether it moves air around or moves particles or that sort of thing. The claim is that it causes infections, that simple, bacterial infection. They

don't have even minimal facts or data that the Bair Hugger is capable of releasing bacteria into the operating room or moving bacteria to the surgical site, let alone prove that it can cause a prosthetic joint infection.

There have been over the past 25 years, going back to 1991, Your Honors, some nine different studies, the latest of which is just this year, looking at this question of biological plausibility, and every one of them concluding the same thing that they could not find or culture any bacteria coming from the Bair Hugger blanket when it's being used properly, but the point is that not biological plausibility itself gets you across the analytical gap between the plaintiffs' proof and valid evidence of causation to pass the Daubert muster. Plaintiffs don't have a single biological plausibility study even supporting the propositions that they state here.

MAGISTRATE JUDGE NOEL: Let me just ask this question, if I could, two questions. First of all, throughout the papers there are reference to prosthetic joint infection, surgical site infection, and deep joint infection. For our purposes today, are those -- I understand that there are differences, but for purposes of determining whether these experts are admissible or not, are those synonymous?

MR. BLACKWELL: Yes, Your Honor, from the

1 prosthetic joint infections are just a subset of surgical 2 site infections, and our view is that plaintiffs don't have 3 any science supporting either one. 4 MAGISTRATE JUDGE NOEL: Okay. 5 MR. BLACKWELL: So it becomes merged in, there 6 being no data there. 7 MAGISTRATE JUDGE NOEL: And then my second question is, as I understand it, there has been no clinical 8 9 studies, that is, blind, whatever you're calling the gold 10 standard, of this very question, whether the Bair Hugger does or doesn't cause these infections. 11 12 MR. BLACKWELL: Your Honor, there were two. I'm 13 sorry, please. 14 MAGISTRATE JUDGE NOEL: Wouldn't it be in 3M's 15 interest to conduct such a study? And if so, why has such a 16 study not been done? 17 MR. BLACKWELL: Your Honor, we'll point out and 18 we'll talk about this more fully in the context of 19 discussing the medical causation experts, but starting in 1991 there were two clinical trials done then where patients 20 21 were compared, those receiving warming from the Bair Hugger 22 to those receiving no warming, and those studies concluded 23 that not only was there not an increase in surgical site 24 infections, that in fact it decreased the incidence of 25 surgical site infection, and that was done early on.

And I might add further, Your Honor, in terms of just the burden of proof -- and so the immediate answer to your question is those studies have been done even before 3M bought an interest in this particular product and company in 2010, so they had been done some nearly 10 years or plus before, 20 years before.

And but the second part of this answer, Your
Honor, is that the plaintiffs have the burden to show that
to the extent their experts are making these claims that
they've got to bring forward that evidence, and we will show
to Your Honors that organization after organization,
including the FDA, has looked at all of the scientific
literature and concluded uniformly that there is no basis
for a claim in science that the Bair Hugger is causing or
contributing to cause either surgical site infections or
prosthetic joint infections. So -- I'm sorry, Judge
Ericksen.

THE COURT: As long as you're already interrupted, is there any brief response you would like to make, you mention the *Glastetter* case, and as you know, the plaintiffs have criticized your reliance on the *Glastetter* case in their papers. Is there any response that you would make to the criticism that *Glastetter* is not so good to rely on?

MR. BLACKWELL: Only, Your Honor, that the Eighth Circuit relies on it, and that's good enough for me, and

it's been relied upon by many courts in this circuit and outside since it was decided. So I think the plaintiffs' position is probably more characterized as not liking the *Glastetter* opinion, Your Honor, but it's not that it's somehow bad law and is somehow make per curiam tantamount to some unpublished and unreliable. And it would be news to the Eighth Circuit per curiam shouldn't be relied upon by courts in this circuit.

THE COURT: I think they were talking about the medical certainty standard.

MR. BLACKWELL: Well, the Glastetter opinion is very clear in the interpretation of Daubert that there must be scientific ly valid proof of causation, and the Glastetter court was even clearer in talking about those scientific proofs have to show causation in the real world, not theoretical animal studies, textings, and so on to show that there is impact in the real world, so those were presented in Glastetter, rejected by Glastetter court, ultimately concluding that they were not valid scientific proof of causation.

And the language in *Glastetter* that the plaintiffs are referring to related to the particular drug involved there where they claimed it caused vascular constriction, where the Court said that there was no scientifically convincing evidence that this drug causes vascular

constriction. That's what the *Glastetter* court in fact said in quotes. And so the plaintiffs may feel that they don't have to meet the burden set forth in *Glastetter*, but the Eighth Circuit didn't say that.

THE COURT: Thank you.

MR. BLACKWELL: So, Your Honor, getting back to the type of evidence that the plaintiffs have here, I was talking about biological plausibility as sort of an interim sort of a screening, because not even biological plausibility gets you across the hurdle into proper scientific valid proof of causation, and many courts have so held in causation cases such as this, but the plaintiffs don't even have that.

So what they're relying on are these tertiary secondary endpoint exploratory studies, studies that involve bubbles and particles and had the beginnings of smoke studies and studies that expressly disclaim causation, and they don't even demonstrate, as I said, biological plausibility. So what are they relying on here? They're relying on those what I call smoke particle -- well, bubble and particle studies. They also rely on animation, a CFD. And no court we could ever found --- could ever find this computation of fluid dynamics animation. We never found a court that's found that a computer animation, especially an unvalidated one, is a substitute for even showing biological

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plausibility, much less causation in the real world.

They rely on the McGovern study, and we're going to dive deep into McGovern, Your Honors, because at no matter what level you look at the McGovern, on the surface it is -- it is flawed on the surface. It's flawed for the reasons that Your Honors have already acknowledged that it has many confounders that were not were controlled for and never even considered, but as we plunge the depths of it, we hope to share, and my colleague Cory Gordon who spent quite a bit of time in the UK digging this out will come up to talk about how that McGovern data is in fact cooked, it's manipulated data, it's flawed data, it was manipulated when the data went from Dr. McGovern and got into the hands of Dr. Scott Augustine and his consort, and they essentially manipulated the numbers to try and influence statistical significance, and we can show that to Your Honors as an additional reason why the McGovern study is hopelessly flawed.

In the context of McGovern, we also want to talk to Your Honors about the Augustine 2017 study. This is a study that the plaintiffs were for until they were against it, and they were for it and volunteered it, Dr. Samet, their expert, at his deposition as additional reliance material. Sorry, Judge Noel.

MAGISTRATE JUDGE NOEL: I have this feeling of

déjà vu all over again. It seems to me that in the context of the motion on punitive damages, I thought everybody agreed that the 2017 Augustine study was a non thing, that it wasn't going to be relied upon by either side.

Defendants were attacking it; plaintiffs said we're not going to rely on it. I thought it was a dead letter, yet it does show back up in footnotes of the memos and you just mentioned it, so is it a thing or not a thing?

MR. BLACKWELL: Your Honor, it is a thing to this extent. It's a thing to the extent that apart from what the lawyers said, Dr. Samet himself volunteered at his deposition that part of what he was relying on as bolstering his opinion was the Augustine 2017 study. That's the first thing.

The second thing is what it reveals about the motivation behind the manipulation of the McGovern data because the same authors were involved in Augustine, the 2017 study. And we can show Your Honors fairly clearly enough that that was, in fact, again, a fraudulent study that was sent through the peer review process claiming that the Bair Hugger performed poorly at certain hospitals and that we learned in affidavit said they didn't even use the Bair Hugger. And there was a motivation to cook that data. And the same authors transferred over to McGovern went through the same thing. And so what we simply want to show

Your Honors that what's at bottom here is scientific or at least science being used for marketing purpose and being manipulated and being falsified for purposes unrelated to good science, and so we want to spend just a little time on August 2017 just to make the -- Augustine 2017 to make the transition to McGovern to show it's the same individuals that engaged in the same conduct with the same motivation and the outcomes are just the same. And it also we think should cast greater skepticism on the overall reliance on McGovern given that baked within it is the sort of dishonesty that's part of a scheme, and that's why we want to talk about it.

So, again, Your Honors, as we say, this is not a weight versus admissibility issue, this is profoundly a fundamental gatekeeping issue.

So, Your Honors, as I say, very familiar with McGovern, we're going to spend a lot of time talking about McGovern because it's Dr. Samet who said that McGovern is the only study that -- and here's what he said, the McGovern paper supplies the only estimate of the risk associated for deep joint infections associated with the use of forced air warming Bair Hugger device, so absent the quantitative estimate from that paper, while it may be a quite plausible mechanistic basis for increased risk, there would not be an association in the real world.

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And so we focus on McGovern because it's the only real world study that the plaintiffs purport to rely upon, and it's a very fragile study. Part of the reason I want to give Your Honors the backdrop and history of the motivation is that it is so fragile that the difference of simply one surgical site infection put over a HotDog column of the study taken away from the Bair Hugger impacts statistical significance, even just one. MAGISTRATE JUDGE NOEL: Let me just interrupt there because this is question has recurred through all the memos and this appears to be an opportune time to ask it, although perhaps you're going to tell me I should hold my question until you get to whoever is doing McGovern. MR. BLACKWELL: I don't think I'm allowed to, Your Honor. MAGISTRATE JUDGE NOEL: In your papers you say repeatedly that when you account for the confounders, including what you're describing now is a mischaracterization of one of the infections, the association between infection and Bair Hugger disappears entirely. MR. BLACKWELL: Entirely, Your Honor. MAGISTRATE JUDGE NOEL: Yet throughout the papers there's this more detailed reference where as I understand McGovern concludes that it's like a 3.8 times risk of

infection using Bair Hugger and then the plaintiffs go through a bunch of arithmetic, and I believe I've seen this also in your papers acknowledging that it goes from 3.8 down to 2.76. How does that disappear and what am I missing in those two different factoids?

MR. BLACKWELL: Your Honor, so going to the 2.76 is simply trying to correct the math in the first place, putting the confounders aside, because the 3.8 itself is not an accurate number according to the person who did the math in terms of what appeared in there. So there's a huge fight or argument over what is the actual data and will the real McGovern data please stand up, and we believe that we can show Your Honors that the data we have is the real data.

And furthermore, to that point, a hopelessly flawed and confounded study that the plaintiffs compound by arguing that the data is flawed doesn't really help them to prove that it's that much reliable given that the data is supposedly confound and flawed, but once the express or known confounders are controlled for, mostly the anticlotting medication and the antibiotic, even Albrecht who did the number crunching and was one of the study authors of McGovern, says that the statistical significance or difference is reduced to zero once the confounders are controlled for. So there are issues over the basic math and whether the math is cooked. I don't think there's a single

1 debate or discussion anywhere in this case that once those 2 confounders are controlled for that that number becomes 3 zero. I don't think that's disputed and --4 THE COURT: Did you say that they're not 5 confounders, they're not real confounders, separate studies 6 show that it doesn't matter what clotting you use so it 7 doesn't matter if you switch the antibiotic? MR. BLACKWELL: That's right, Your Honor. 8 9 that's what example of what I referred to as sort of the 10 blue pencil approach to this is as to simply say the 11 confounders aren't really confounders, and so that is not 12 what the peer review has concluded, that's not what's 13 generally accepted in the scientific literature. And with 14 all due respect to the plaintiffs on that regard, they 15 really are just whistling ipse dixit when they make that 16 claim. 17 THE COURT: Did you just make that up? 18 MR. BLACKWELL: It felt good, Your Honor. 19 MAGISTRATE JUDGE NOEL: This is the first case, I 20 was just amused as I'm reading through the papers, the first 21 case I can think of in my 28 years on the bench where I've 22 actually had occasion to use and understand and actually 23 apply in context the phrase ipse dixit. 24 MR. BLACKWELL: You'll get a lot of practice here 25 too, Your Honor. Even the argument that the 3.8 odds ratio

is so big that it could not have resulted from chance, completely made up. There's nothing in the scientific literature that says that a 3.8 odds ratio is so big that you don't have to consider confounders. There is no reputable analytic approach to the science where confounders shouldn't be considered. Lots of ipse dixit here.

So when we get into the deeper dive on McGovern and the numbers, I will tell Your Honors ahead of time it will -- the space will get a little weedy. We tried to make it condense, but it's important to see, you know, where the flaws are in the data that underlie all of this. And, as I say, Mr. Gordon will go into that in greater detail.

But Your Honors are very familiar with the fact that the FDA has weighed in on the issues that are pending in this lawsuit and the FDA letter that came out on August 30th of 2017, and they did this having reviewed the science, being aware of the claims in the lawsuit, having looked at the literature. They even looked at the so-called fake MDR's that were discussed in the Court as well that were purportedly, in one instance, sent by Dr. Gothey. We find out it was stated by Dr. Gothey; they were being written in fact by Scott Augustine, and they looked at those too. And the FDA concluded, after a thorough review of the available data, the FDA has been unable to identify a consistently reported association between the use of forced

air thermal regulation systems and surgical infections.

What this is really relevant to and underscores is what is the state of the art in the general scientific and medical community? The FDA is certainly adds this voice to a consistent body of studies that have all uniformly found that there's no science supporting a causation.

MAGISTRATE JUDGE NOEL: You mention in your paper that this paper came out after the FDA became aware that certain hospitals were reluctant to use forced air warming. How did the FDA become aware of that and what process did the FDA go through in generating this August letter?

MR. BLACKWELL: Well, Your Honor, the FDA became aware in large part because of all of the publicity around the lawsuits filed here in this MDL, from MDR reports, and other reports filed by Scott Augustine to the FDA that have been involved in investigations of claims submitted to the FDA about this for years, and reached the point now where physicians were starting to make decisions about patient care based upon the kind of allegations that are being made here that the FDA does not find any real basis for in the real science out in the real world and so they wanted to give directions to the physicians and patients, and this was the outcome.

MAGISTRATE JUDGE NOEL: So was anybody at 3M involved in notifying the FDA that decisions are being made

1 by doctors based on this claim? 2 MR. BLACKWELL: 3M, Your Honor, was involved, at 3 least the FDA did investigate and question 3M, as they did 4 Scott Augustine. 5 MAGISTRATE JUDGE NOEL: Sua sponte or 3M asked 6 them to investigate and interview us? 7 MR. BLACKWELL: No, 3M did not ask FDA to 8 investigate and interview. 3M asked the FDA to investigate 9 the claims that Scott Augustine was making around the 10 science, and we will show Your Honors that as late as 2012, 11 with respect to the McGovern study alone, the FDA wrote to 12 Scott Augustine and asked him to stop making representations 13 that the McGovern study showed that efficacy of this 14 product, the HotDog, was good evidence that the Bair Hugger 15 performed relatively poorly in comparison to it is the best 16 answer I can give Your Honor, but this has been all over 17 from TV broadcast that some of the plaintiffs' firms in here 18 have been associated with. It's just been into the news, as 19 one might expect. 20 MAGISTRATE JUDGE NOEL: But isn't this letter, 21 this August letter from the FDA, somewhat unusual to just 22 sua sponte come out with a position in a case that is 23 clearly a major piece of litigation? 24 MR. BLACKWELL: It's unusual, Your Honor, in a 25 case of unusual things. It's unusual to have a case of this

sort where there are claims of causation where the plaintiffs' own studies don't support causation. It's unusual for there to be this public kind of uproar and over an issue that no scientific, valid scientific study supports. And so if the public starts to get worked up by claims, by advertisements, et cetera, this comes to the attention of the FDA and because there is no science and uniformly no science supporting it, they took a position because it becomes a matter of patient safety and care and physicians not knowing what to do in light of this. So ultimately, Your Honor, so the -- as Your Honors know, the FDA recommended the continued use of thermal regulating devices.

And I will say too if the plaintiffs have some evidence that they want to point to, anything that 3M gave to the FDA or anyone else can be gotten through a FOIA request, and if there's any kind of basis for a claim that 3M did something improper with respect to the FDA beyond, you know, rumor, I'd love to hear it because we don't know about it.

So I'll stop with this, Your Honor, because this

In Re Bausch & Lomb case is on all fours with this case in

many ways, where the Court there found plaintiffs cited no

published peer reviewed or scientific literature concluding

that moisture lock is related to an increased rate of

non-Fusarium infections because there is none. No medical or scientific organization or board, epidemiological or anecdotal study has associated non-Fusarium infections with moisture lock use. That case, same as this case.

In sum, plaintiffs' theory is an educated guess.

And there it's the same with respect to this case. There is no study that the plaintiffs have that's a gold standard study that's showing that the Bair Hugger causes surgical site infections. They don't even have biological plausibility studies at all.

And Your Honors may wonder, given how easy it is to test for biological plausibility, in taking up on Judge Noel's question earlier about 3M's testing, that simply was the simplest way, getting a little agar plate of petri plate and just setting it out and trying to capture bacteria and culture it. How simple and how cheap is that to do? You'll find that not one of these very highly credential experts did that one time and will come in and tell the Court the results. And given that, given how simple it is, should cast some degree of skepticism on the science that they're in fact promoting as proof of causation.

And we will show Your Honors in fact that the exploratory study, the particles, the air movement and so on, were studies that were concocted by Scott Augustine and what he and his cohort Mr. Albrecht referred to as the

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Augustine publication factory, and those studies were never designed to establish whether the Bair Hugger causes surgical site infections; those were studies designed to completely avoid the question to get results they could use for marketing purpose, and we'll show that to Your Honors too. It's completely unreliable, disreputable, and not trustworthy. Thank you, Your Honor. THE COURT: Thank you, Mr. Blackwell. And Mr. Ciresi. MR. CIRESI: May it please the Courts, I presume, counsel. Let me address at the outset the FDA question that was raised by the Court. I'd love to know what 3M said to the FDA. What they responded in a specific objection to a request is those documents are not relevant to the parties' claims or defenses. The deadline for general causation fact discovery has passed and plaintiffs have not sought leave to take out of time discovery. A pattern of --JUDGE LEARY: Mr. Ciresi, are you suggesting that the FDA bulletin or letter to physicians or the interested health care providers was cooked in and of itself? MR. CIRESI: I have no idea whether it was cooked. I'm not accusing the FDA of cooking something. I am aware, going back to Dalkon Shield to Mirapex, that there has been case after case after case and product after product has not been provided full, complete transparent information. I

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       don't know what 3M said to them. Do I believe that the FDA
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       in and of itself cooked its communication? No. And I'm not
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       suggesting that. What I am suggesting is that we don't know
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       what 3M said and we cannot find out because they don't want
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       us to know.
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                 JUDGE LEARY: It strikes me as the most important
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       thing is whether or not in the estimation of the FDA its
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       report or bulletin was reliable, and it seems to me that
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       you're conceding that, from the FDA's point of view, it was
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       reliable.
                 MR. CIRESI: What was reliable?
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                 JUDGE LEARY: Its report and its advice to
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       physicians and hospitals.
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                 MR. CIRESI: What was this report, Your Honor?
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       What did it say?
                 JUDGE LEARY: Well, you have it.
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                 MR. CIRESI: Well, what it said was that the --
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       can't identify consistently reported association between
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       forced air warming and SSI's. It didn't --
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                 JUDGE LEARY: Having looked at the available
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       literature.
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                 MR. CIRESI: It didn't talk about prosthetic
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       infections which goes to a previous question. There is a
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       difference between deep joint infections and SSI's. I can
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       get an SSI because you, the doctor, after the operation,
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       engaged in negligence with an unclean changing of the
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       dressing, all kinds of things --
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                 JUDGE LEARY: Let me stop you, Mr. Ciresi. You're
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       saying that this report had nothing to do with prosthetic
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       surgeries, but the very reason why this report was issued is
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       because of the controversy that was being generated with
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       regard to forced air warming devices and prosthetic
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       surgeries.
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                 MR. CIRESI: Your Honor, what you have to look at
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       is what the FDA says.
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                 JUDGE LEARY: I just paraphrased what they said.
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                 MR. CIRESI: Paraphrased it. You have to look at
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       the language --
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                 JUDGE LEARY: Mr. Ciresi, the impetus for the
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       report was because of the controversy that had developed
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       relating to the use of forced air warming devices and
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       prosthetic surgeries. That's the reason they issued it. So
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       it you want to parse the difference between prosthetic
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       surgeries and a common variety of surgical site infections,
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       that is not in -- that is not in that report.
                 MR. CIRESI: That's what the data is about.
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       hasn't been -- you asked about whether -- one of the Judges
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       asked about whether there's been a study, a particular
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       study, there hasn't been. 3M did not do it. It was
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       recommended that they do it by Dr. Sessler.
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1 JUDGE LEARY: All I'm talking about is what the 2 FDA did, and they said that they looked at available 3 literature, the --4 MR. CIRESI: Your Honor --5 JUDGE LEARY: -- issue that was in controversy. 6 MR. CIRESI: Yes, and they do not have a study 7 that looks specifically at that issue. Now, as long as 8 we're on epidemiology, I was going to get to that second. 9 I'm here for two purposes. Number one, what are the 10 material evidentiary facts which establish the general 11 factual construct underlying and underpinning the motions 12 before Your Honors; secondly, the role of epidemiology in a 13 general causation context. And that's precisely, Your 14 Honor, where you're at right now. 15 The role of epidemiology, statistically 16 significant epi studies, are not required for causation in 17 the scientific world. Epi studies prove associations, don't 18 prove causation. Much has been made in the punitive damage 19 orders and other places that this study disclaims causation. 20 That is normal in an epidemiological study. Statistical 21 significance does not show causation. In fact, you could 22 have statistical significance and there wouldn't be a 23 causation. It doesn't address that issue at all. It talks 24 about the probability of chance. That's all it does. 25 doesn't suggest there's causation in a given situation or

not.

MAGISTRATE JUDGE NOEL: But I'm looking at page 31 of your memo -- I'm sorry, page 25 of your memo and talking about McGovern.

MAGISTRATE JUDGE NOEL: Good question. This is the one -- the memo in opposition to exclude Samet, Jarvis, and at the top you say the study authors, meaning the McGovern study authors, the study authors also testified

MR. CIRESI: Which memo, Your Honor?

repeatedly that they continue to stand behind their findings
that Bair Hugger increases the risk of DJI, deep joint

12 infection.

And I guess that caused me to ask a question, because then further down we talk about associations, and I thought the whole point was that nobody claims that McGovern proves causation. What McGovern shows is an association between the use of the Bair Hugger and a 3.8 times higher rate of deep joint infection. And I guess my question is, doesn't this line suggest that by saying that the authors stand behind their findings that the Bair Hugger increases the risk is a statement of causation, isn't it?

MR. CIRESI: No, it's not. It's a statement of an increased risk. A relative risk is risk in exposed versus risk not exposed. It doesn't necessarily say there's causation. It is an element under Bradford Hill criteria

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that should be taken into account if one is following valid scientific methodology in arriving at a conclusion of causation.

MAGISTRATE JUDGE NOEL: Okay. So just so that I'm clear, the study authors don't go beyond McGovern. McGovern simply still stands for the proposition and plaintiffs only put it forward for the proposition that there is an association between the use of Bair Hugger and the incidence of infection?

MR. CIRESI: It stands a little bit more than that, Your Honor. You're right as far as you went, but it shows an increased risk, relative risk. Even when you take into account confounding variables that risk is lower, but it's still over two. Now, the mere fact you're over two does not mean there's causation, and I would never stand in front of you and say that. For 47 years I've been trying these types of cases. There's a reason why medical treatises are not given to the jury. Under 803.18, they're not. Now, statements of a manufacturer are given to the jury because they should judge the credibility of what they're saying. They look at those underlying facts. A medical treatise is examined through an expert witness. there are confounding variables in every epidemiological The only study -- you asked, does 3M ever do a study. study. The study was recommended to them. They have a

protocol for it. I took the deposition of the individual. They haven't done it. They won't do it.

MAGISTRATE JUDGE NOEL: Nor have you, correct?

MR. CIRESI: No, we haven't. Oh, so that's a very good point. No, we haven't. So that what you're saying is that not the manufacturer who is presumed to know it has a legal duty to know more than anybody else about their product does not have to do the study but an injured person out in the field who gets the product used on them should do the study?

MAGISTRATE JUDGE NOEL: Well, yeah, because you're the plaintiff, and that is sort of the way our legal system works, it's your burden to establish causation, correct?

MR. CIRESI: Yes, but we don't have to do that type of study to establish causation, and we're not required to do that type of test to establish causation. If there was -- you know, Judge, if we look back at epidemiology and go back to Henle Koch, okay, tuberculous, cholera, those tests are different. There's different types of causality. There the causal factor is necessary and sufficient to prove causation because that's all it does. If it's removed, you don't get it. That evolved into the 20th century to the Bradford Hill, and Bradford Hill frankly arose out of cigarettes. It dealt with lung disease and smoking. And as the science developed, what the medical world did, an

epidemiologist did, is they say you look at other factors.

You take in the fact these criteria. And that's what I

would like to get at, the criteria that are present in this

case and I think the factual underpinning of how Your Honors

are going to have to look at the issues before you.

These facts are agreed to, frankly, by all the witnesses, the chain of infection, the biological plausibility. Gary Hansen, who was at Arizant and its predecessors from 2001 to 2015, was the director of research and development from I believe 2006 through '13. Before that he was the director of advanced technology. He had an ongoing responsibility for engineering of the product. He established policy. He was at a high level. He made planning level decisions. He knew the probability of injury and he was indifferent to it, and his evidence is uncontroverted. Chain of infection, all present in the Bair Hugger and its environment of use.

And I believe this is critically important. Any product liability case looks at two things, first of all, you identify the hazard as an engineer and then you look to how you eliminate that hazard, if there is a hazard, and it depends upon its probability of reoccurrence, how severe the injuries may be if that does occur, et cetera.

What did Mr. Hansen testify to on the chain of infection with the use of the Bair Hugger in its normal

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operating condition? The pathogens or the bacterias are present, fomites are present. Fomites mean particles, non-living particles that carry bacteria, and there are studies that prove that and they're not going to deny that. These particles can be clothes, skin, all kinds of non-living objects. There's a means of transmission with the Bair Hugger. That's the air flow. The pathogens are viable. There's a susceptible host.

And here Mr. Hansen went into detail of the environment of use. You have compromised patients. They may even have diabetes which are more compromised, and he knows that. They could be obese which creates another risk, and they know that. They know that the environment in the operating room has pathogens in it. They know the purpose of liamor flow. They know that you should reduce the level of particles to the greatest degree possible, not increase them, in the area of the surgical site. Testified to all that, the susceptibility of the host. And he knows, most importantly, in deep joint infections, which is different than SSI's as a generic term, that a small bolus of bacteria, very small, one or two pathogens, can cause injuries that, in his words, are catastrophic. He knew all that. They never tested the product to see whether pathogens come out of the distal end, never.

And what do they tell the courts? Augustine, it's

Dr. Augustine, we've spent more time on Dr. Augustine, I salivate at the opportunity to cross-examine Dr. Augustine. Salivate because nothing was done to test this device.

510(k) predicate was the wetland, the Sweetland bed warmer, wasn't even used during surgery. That was the 510(k) predicate, and that's how you can get a device from an FDA, Your Honor, under the market, no testing whatsoever.

He mentions one study, Zink. Zink, those were only eight people. 25 percent of them, a quarter, had bacteria in the dish at the surgical site. Well, he said there was another study. He couldn't even pronounce the name. It was the co-author of Zink. That's all they did. That's all they did.

Now, when you look at this in the simple context of what's the hazard and how do you eliminate it and what did they do, in other words, what did they know, when did they know it, and what did they do about it, it becomes very simple to look at the context of this case and what the facts are from which a jury is entitled to make a conclusion.

We give Your Honors, as we do in all these cases, reams of documents and paper saying there's no genuine issue as to any material fact. And it takes I don't know how many trees to suggest there isn't. Well, the facts here are pretty direct, and when you analyze the epidemiology in the

context of that, then you find that there is a chain of infection here known to this defendant, nothing done to change it, and that infections are happening. The study that can be done, the bacteriology study, has not been done, as I suggested earlier by 3M, even though it's been suggested by their consultants. If brakes could fail on a car and it was due to a defect, would anybody suggest that the manufacturer shouldn't remedy that defect regardless of how many times it happened?

In case after case of drugs or medical devices, you will find that it's the manufacturer that has all the information. Epidemiological studies are almost impossible to conduct on all of these. The power of the studies that are needed are enormous. It costs millions of dollars to do these studies. That's why Bradford Hill criteria are used to determine causation. You really think that a doctor who goes in and makes a differential diagnosis says, oh, is there an epidemiological study? And then all they're going to rule on that and I'm not going to say there's a cause unless I have that? No. They use the epidemiology as an element, as part of the components of making a scientifically valid conclusion and judgment. That's what we have in this case.

The testimony of Hansen, which I've highlighted, is repeated, Your Honors, by Michelle Stevens Hulse, by

every deponent that I took, every one. There's no disagreement here. The fact is this device has a chain of infection pathway, no different than other products that have been out there, and nothing was done to correct it.

And it's not necessary, there are alternative ways to warm a patient which is another element that's considered as to whether someone acts willfully, intentionally, or just negligently. There's no doubt that the actions of this defendant were deliberate and intentional, none, based on the testimony of their high-level managers.

Epidemiology, and on I believe it's page 2 of the motion to exclude our experts is where they use the same old myth that they've been throwing up to these two courts constantly, that's McGovern. And they say this, Ultimately plaintiffs' experts fall back on just one uncontrolled observational study to support the opinions that the Bair Hugger system increases the risk of DJI. It's not true. It's false. And my colleagues as they address each one of the experts in this case, Dr. Samet, Dr. Jarvis, and Dr. Stonnington, will go into that in greater detail. It simply isn't true.

But as I said earlier, and I think this is -excuse my frustration, Your Honors, but epidemiology has
been so misused by so many people, courts have been so
misled, and, frankly, a lot of decisions are based on the

advocacy in front of the courts and rightfully so because the courts can't do it all themselves. That's why the manual says that epi is not necessary to prove causation.

Statistical significance is only a tool. It is not the determination of causation. The tradition of scientific explanation requires that an assertion of proof of cause and effect must specify the mechanism by which the effect is produced. Here, it is present and agreed to by everyone, the chain of infection. There's a temporal association which is one of the most critical Bradford Hill criteria. There is a strength of association. That's McGovern. And you can argue about that. That's what it's about. That's what happens from that witness stand.

Mr. Blackwell goes into detail about how, well, you know it's 3.8 but then it's reduced to 2.8 but it's really not 2.8 because of this. All right, let's see how those experts stand up under the test of cross-examination. I wish that all three of you could have observed the depositions of -- just the ones I took because I can't speak for the other ones, I wasn't there, but I wish you could, you know, you could see what they said and be able to judge their credibility. That's what these people do, the jury. That's what's happening here. And we're arguing over inferences and conclusions that should be drawn by a jury so long as we have valid, scientifically credible opinions, and

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       they are.
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                 The statement that only McGovern is relied on is
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       belied just by John Samet. Dr. Samet is one of the
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       preeminent world experts in epidemiology. He relied on over
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       200 sources. Ms. Conlin will get into that in greater
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       detail.
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                 THE COURT: Just before you leave McGovern, would
       it be a relevant factor at all whether the study authors
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 9
       stood to gain financially from the results of this study?
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       How would that factor in?
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                 MR. CIRESI: Your Honor, if I were answering that.
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                 THE COURT: I'm asking you.
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                 MR. CIRESI: I know, and I am going to answer that
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       and whether I was answering here or anyplace, I would say of
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       course it's relevant. It's a factor that should be taken
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       into account by the trier of fact.
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                 THE COURT: Well, let's assume, because we have a
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       couple of days set aside for Daubert hearing, that the Court
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       does have a gatekeeping role.
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                 MR. CIRESI: I'm not denying that.
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                 THE COURT: And so my question is what, if any --
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       I mean, how -- first of all, was there a financial interest
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       in the outcome of the McGovern study?
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                 MR. CIRESI: I don't know. Not that I'm aware of,
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       none.
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                 THE COURT: And if there had been, how would the
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       Court use -- what would be the appropriate --
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                 MR. CIRESI: Let me answer that with a
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       hypothetical question which I think answers it, and that is
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       that if 3M does a study which they have the protocol for,
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       they haven't done yet, would their financial interest be a
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       factor that should be considered? Yes. In every study
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       that's done where someone gets -- some investigator gets
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       money from a company or an organization, they're required to
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       disclose it.
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                 THE COURT: I think Ms. Conlin wanted to speak to
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       you about whether there's any evidence of a financial --
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                 MS. CONLIN: I was just going to say that the lead
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       author Dr. McGovern -- excuse me, Your Honor -- lost money,
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       so there was no financial interest in the McGovern study.
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       These individuals didn't work for Augustine or anyone else,
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       and I'll get into it in more detail during my presentation.
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                 THE COURT: Okay. Mr. Ciresi, my question --
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                 MR. CIRESI: Judge, can I ask, is your question in
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       terms of -- let's just speak hypothetically, in terms of
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       financial motivation, is it -- does Your Honor's question go
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       to should you exclude a piece of evidence based solely on --
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                 THE COURT: That's an overly simplified question.
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       As you know, the cases talk about one of the things that a
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       gatekeeping court can take into account is whether science
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       is litigation based, and would that same caution extend to
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       studies where there is a financial interest in the outcome
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       of the study?
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                 MR. CIRESI: I think that it is a factor -- I
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       don't think. I know it is a factor that one should consider
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       whether one is functioning in the role of gatekeeper or
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       finder of fact.
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                 THE COURT: So my question then specifically on
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       the McGovern, if there's no financial interest, I was struck
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       when I read the study at the end, it says the author or one
       or more of the authors have received or will receive
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12
       benefits for personal or professional use from a commercial
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       party related directly or indirectly to the subject of this
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       article. And my question is what -- how -- what are we to
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       do with that in the context of our directive to take into
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       account whether a study is for the purpose of litigation and
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       if financial benefit is to be considered in a similar way to
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       litigation study, the statement right there in the study
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       that the author or authors will receive personal or
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       professional benefit?
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                 MR. CIRESI: I just want to take a look at the
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       statements.
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                 MS. CONLIN: Your Honor.
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                 THE COURT: I just -- we have -- I have to hear
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       from -- if you want to talk to Mr. Ciresi, but we just got
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       one at a time. But did you want to go ahead and talk to
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       Ms. Conlin, Mr. Ciresi?
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                 Page 9 of -- 9 of -- well, I don't know if you
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       have a copy of it, but just before the references.
 5
                 MR. CIRESI: I don't see it here, Your Honor.
 6
       Just let me see if I can consult with Ms. Conlin.
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                 It's right at the very end right after the
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       supplementary materials, that's the one you're talking
 9
       about, Your Honor?
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                 THE COURT: Yes.
11
                 MR. CIRESI: Yep. The author of one or more, I
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       believe, and I will let Ms. Conlin clarify this when she
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       gets up to argue this part of it, but I believe that refers
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       to Mr. Albrecht who was working part-time, I believe, for
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       Augustine when he was matriculating toward his degree and
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       was being paid by him, I believe that's what it was.
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       what I say to this is that as this goes back to the point I
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       raised earlier, and that is that in any medical study,
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       because of the fact that there were in the past, as Your
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       Honors know, secret studies, secret studies paid for by
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       other people that had an interest in it and it was not
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       disclosed.
23
                 THE COURT: In this case?
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                 MR. CIRESI: No, no, generally so that the
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       practice and the rule is that you should disclose any type
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of potential economic connection so that a gatekeeper or a trier of fact can take that in account if they decide to based on the balance of the study and whether it is a study that follows valid scientific methodology. Now, if it doesn't and it's highly speculative and it's nothing but conjecture and the person that's being paid for it, whether it was conducted by 3M or anybody else, I would imagine that would be taken into account.

The type of scientific principles that I've talked about in my time here, Your Honor, and I'll close with this, Your Honors, are the ones that were followed by each one of the experts of the plaintiffs. It is precisely that scientific reasoning and methodology that has been proven reliable and valid over time across a wide range of products and issues regarding associations and causation, and that's what they utilize in framing their opinions in this case.

And for any lawyer to stand in front of a court and to suggest or imply that one needs an epidemiological observation study that proves causation or establishes causation is to exhibit a profound lack of understanding of what epidemiology is about. There are, as I said earlier, confounding variables in every study. It's just by it's nature there are apparent associations that are not statistically significant may nevertheless be causal and those that are statistically significant may not be casual.

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Indeed, the test of significance, as I reference, does not even address the issue of whether an association is causal or whether it's due to some error resulting from the study's design, its interpretation, or the conduct of the study itself. And that is what is evaluated on that component, but that's only one element of a causation opinion. And as I said, that's why Dr. Samet, for one, relied on over 200 sources. Yes, Your Honor. MAGISTRATE JUDGE NOEL: So as I understand the defendants' world view of this case, they want us to believe that your case depends entirely on two questions. One, whether McGovern is valid science; and two, whether particles are an adequate substitute or proxy for bacteria. Just in 25 words or less, is that wrong? In other words, are they right that if McGovern goes out and particles are not proxies for bacteria, you don't have a case? MR. CIRESI: No. MAGISTRATE JUDGE NOEL: And why not? MR. CIRESI: Because bacteria can get there in a number of ways, not just on the backs of particles, if you

MR. CIRESI: Because bacteria can get there in a number of ways, not just on the backs of particles, if you will. There is no doubt of how this machine works, none.

And there's no doubt in anybody's mind that one or two bacteria, one or two bacteria can cause a deep joint infection because it creates the biofilm and it festers for a long period of time. It's different than other types of

infections.

In the Mirapex cases which were in this district, they're for Parkinson's diseases. It was for Parkinson's.

And the MDL was here. It was effective for Parkinson's but it also caused abnormal behaviors because it was a dopamine antagonist and it worked on the part of the brain that created hyperactivities in certain areas. They knew it.

They never warned about it.

Now, that isn't to say that Mirapex couldn't be used for Parkinson's, but they should have warned about it because they knew about it. This device may be good for other types of infections -- or surgeries, I should say, excuse me. It isn't for this type of surgery. That's what we're saying. And not because of one study, Your Honor, or that a bacteria can ride along, if you will, on particles, no, for the whole totality of the Bradford Hill criteria inherent in the experts' opinions that have been proffered for Your Honors. That's the best way I can answer that, Your Honor. And I apologize it was more than 25 words.

MAGISTRATE JUDGE NOEL: It was more than 25 words, but it answered my question so thank you.

MR. CIRESI: Thank you, Your Honors.

THE COURT: Thank you very much. All right.

Defendant's motion to exclude SJS, the medical experts. So

is this you, Mr. Blackwell?

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                 MR. BLACKWELL: Yes, Your Honor.
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                 THE COURT: Will you be talking about -- are we
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       going to go Samet, Samet, Jarvis, Jarvis, Stonnington,
 4
       Stonnington? Or are you going to Samet, Jarvis, Stonnington
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       and they're going to come back with Samet, Jarvis
 6
       Stonnington?
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                 MR. BLACKWELL: I'm going to do Samet, Jarvis,
 8
       Stonnington together.
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                 THE COURT: As you briefed them.
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                 MR. BLACKWELL: And I think they want to kind of
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       segregate them out.
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                 THE COURT: All right. Why don't you go with
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       yours, and they can talk about them in whatever order they
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       want. But we'll -- so basically we'll hear from you, and
15
       then we'll hear from them.
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                 You should sometimes come to one of these judge
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       conferences filled with really old people and there's ding,
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       ding, ding, ding, none of us know how to turn off our
19
       stuff. I might have told you that story before.
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                 All right. Mr. Blackwell.
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                 MR. BLACKWELL: Thank you, Your Honor. I stand
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       here to argue our motion to exclude the opinions of
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       plaintiffs' medical causation experts Samet, Jarvis and
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       Stonnington. Our argument is largely premised on their
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       reliance on the McGovern study as the only real world study
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they have that shows an impact in the real world. Our view is that those opinions are based upon completely unreliable data to the extent they premised in McGovern, to the extent premised in the exploratory studies, CFD, studies about particles, air movement, etc., those exploratory studies are completely insufficient proof to bridge the analytical gap between -- around the science plaintiffs have and the science they're required to put on to meet the Rule 702 requirements.

As I mentioned in the opening, Your Honors, for the McGovern specific aspect of this I'll ask my partner Corey Gordon to speak to just McGovern because that is -- he developed McGovern. I want to speak to the general state of the science and the fact that the plaintiffs' view and theory of the science is generally rejected in the scientific and medical community.

I wanted to take a couple things out of order, just to set the table a little bit, because there was a lot said again about this SSI versus PGI issue, and I want to pull up a slide that might be the Rosetta Stone that kind of gets to the bottom of this, if I could pull up number 37. And what this is, is international consensus meeting, as Your Honors can see, and that of the prosthetic joint infection, and so this is an international consensus meeting that is about PJI.

And let's see what they have to say. This is from October 22nd of 2013, and this group met in light of the kinds of things that came out of McGovern and so on, and but who is this organization? Four hundred delegates, the world's best experts in musculoskeletal infection from 52 countries and 160 societies. 300 of the 400 delegates attended the meeting and were involved in voting, and the consensus processes, Your Honors, to meet there took over 10 months, and they purported to have turned over every stone in search of evidence to these questions with over 3500 related publications evaluated and most certainly McGovern.

I wanted Your Honors to see this in terms of who was there, delegates from various disciplines, orthopedic surgery, infectious disease, and as you can see the rest of these, towards the end it says, Numerous scientists with interests in orthopedic infections came together to evaluate evidence when present or reached consensus regarding the current practices for management of SSI slash PJI.

Discussed interchangable, kind of one and the same. And so the evidence, when available, has been assessed, otherwise the cumulative wisdom of 400 delegates from 52 countries and over 106 societies has been amassed to reach consensus about practices.

So what they address is a question that's central

to why we're here. There were over 300 delegates there at the face-to-face meeting there for the voting, and wanted to have Your Honors to see what the strength of consensus means before we show you what the consensus vote was. And Your Honors can see that at number 3, a super majority strong consensus is a consensus where there's 66 to 99 percent agreement, so just, you know, a category short of unanimous. So the information available in this document is based on evidence, whenever present, or the result of cumulative wisdom of over 400 of the world's experts.

So here is the question that they were addressing, SSI slash PJI, do forced-air warming blankets increase the risk of surgical site infections? Consensus, "We recognize the theoretical risk posed by forced air warming blankets and that no studies have shown an increase in surgical site infections related to the use of these devices. We recommend further study but no change to current practice."

And that was a strong consensus, position, point of view even in the face of McGovern. So this argument about SSI suddenly meaning something is superficial as opposed to a PJI which means deep joint infection, with all due respect, is insignificant that's created primarily by the lawyers in this courtroom and not by anything that's found in the literature that simply discuss PJI as a subset of SSI. And here where we have this international consensus

meeting of prosthetic joint infection, experts, doctors, etc., by the hundreds strong consensus position that there's no evidence there to support it.

MAGISTRATE JUDGE NOEL: Well, 90 percent of -- almost 90 -- 89 percent agreed with the statement that they recognize a theoretical risk and that further study is recommended, right?

MR. BLACKWELL: Yes, Your Honor. And so further study recommended, meaning that the current state of the science today doesn't support a valid claim for that -- for that risk. Theoretical is never going to be sufficient to pass muster onto Daubert. There must be something that shows there's a real world effect. And like anything else that as far as science knows today, this substance is not dangerous but we always continues to study things. But the danger is in having litigation lead science by having outcomes in the court of law that don't exist out in the scientific world. And here you have a strong consensus by those who are concerned about prosthetic joint infections as well as SSI's.

I wanted to clarify one other thing related to the Bradford Hill criteria or the Bradford Hill factors.

Bradford Hill factors are not factors that can be used to serve to the basis for the valid science establishing a positive cause -- positive association or causation in the

first instance. You only reach Bradford Hill factors after there's been a valid finding of a positive association.

If I could pull up number 79. And this is from the reference manual in scientific evidence at pages 598 and 599. The authors of the Reference Manual on Scientific Evidence emphasize that the Bradford Hill factors are employed after a study, and that's in the text in italics, "only after the study finds association to determine whether that association reflects a true causal relationship."

In the context of McGovern, the best that can be said about that study is that it disclaims there being a causal basis for the positive association found due to, it's clear about it, the uncontrolled confounders that are addressed in that study. Or should I say not addressed in the study but referenced in the study, Your Honors.

So this isn't simply a matter of no epidemiology study making a finding of a causation. This is not about generalities. The specifics of the McGovern study is that it is clear why it is limited and it's clear on its face it's because the, of amongst other things, the confounders that were not controlled for, wasn't even a randomized study.

So I'll show Your Honors in a moment how McGovern has actually been discussed in the broader general medical and scientific communities and the very interpretation here

1 that plaintiffs are espousing that it somehow can be used to 2 get a pair of scissors and a pacepot and cut out the most 3 positive association and rip it from its context, has been 4 rejected in the general scientific medical communities. 5 THE COURT: Just help me -- my memory of the 6 McGovern study. I know that some of the confounders that 7 were discussed were the ones that have proof that don't 8 really matter. Did it also talk about -- I just remember in 9 the plaintiffs' brief they were critical of a list of non --10 obesity. 11 MR. BLACKWELL: Yes. Fitness for surgery. 12 THE COURT: Right. 13 MR. BLACKWELL: There's a whole list of those 14 confounders which still were not addressed, and there's been 15 plenty --16 THE COURT: And did the McGovern study itself 17 acknowledge that the obesity group of factors also was not taken into account? 18 19 MR. BLACKWELL: Yes, it does, Your Honor. And as 20 Your Honor notes in the punitive damages order that just 21 came out, it does take into account, and it makes a 22 reference that's to the effect of those confounders could 23 have also impacted the outcomes, the positive association 24 seen in the McGovern study. 25 THE COURT: Right, right. I'm just looking

-- right. But that is in the McGovern study somewhere, isn't it?

MR. BLACKWELL: It is, and so as it says, Your

Honor, that I think at pages 5 and 6, McGovern says unfortunately the study was neither randomized nor controlled for variables identified elsewhere as important predictors for deep infection.

THE COURT: I remember the sentence that starts "unfortunately," so it's in there, okay.

MR. BLACKWELL: It is in there, Your Honor, and the types of health factors, co-morbidities, that Your Honor is referring to were included in that list, I think it's around pages 5 and 6 of the McGovern study.

Now, so I want to move away from Bradford Hill for just a moment, but we don't reach Bradford Hill unless there's already established good scientifically valid proof of causation, at least a positive association, before we can cross the bridge to Bradford Hill. And it's not to be used to launder or otherwise insubstantial, not competent opinions to launder through Bradford Hill and then they suddenly come out strong and fortified proof of causation. So the scientific manual on evidence says that these factors are to be employed only after a study, a valid study, finds an association, and here, there isn't any.

There can be arguments from all day that lawyers

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can create about pathways to infection, and what's important from a scientific point of view is not the description of the pathway but the description of what its destination is and what it proves when it arrives there. Does it prove the Bair Hugger produces surgical site infection? And there is no study that does that. Are there types of studies that could? A proper observational study, if we could pull up number 54, so again, from the Reference Manual of Scientific Evidence, that observational studies provide good evidence in the following circumstances: The association seen in studies were different designs on different kinds of subjects and done by different research groups. reduces the chance that the association is due to a defect in one type of study, a peculiarity in one group of subjects, or the inaccuracies of one research group. And so it is calling for the study of more than just one generally and that particularly the one study, such as McGovern, that's hopelessly confounded, there are ways to do proper observational studies. There, the plaintiffs do not have any. So if I may, Your Honors, returning to the

So if I may, Your Honors, returning to the beginning, so to speak, as to why it is we focus on McGovern, I won't dwell on this much because Your Honors have seen it and heard it, and, again, this is what Dr. Samet has said, the McGovern paper supplies the only

estimate of the risk associated for deep joint infection associated with use of the forced air-warming Bair Hugger device, so absent the quantitative estimate from that paper it would be -- while there would be a quite plausible mechanistic basis for increased risk, there would not be an association in the real world but for McGovern. And we might add, we volunteered his reliance on Augustine 2017.

Dr. Jarvis, was there any other study that you referenced in your report that purported to show a relative risk of Bair Hugger versus some other warming modality in terms of joint infections? No. He was being asked about McGovern, that was -- the solid one was McGovern. Dr. Jarvis, Your Honor, didn't take into account the confounders in McGovern whatsoever. He just simply took the conclusion, the positive association, and went down the road.

And Dr. Stonnington was a little back and forth, so we ask him about McGovern, and he said, I'm going to say that you have to put them, McGovern and the other studies, together to make a conclusive argument. And he said I think what's conclusive is the Bair Hugger is dangerous.

Augustine, I mean, McGovern is a very important study, very important findings, increased infection rate in patients with Bair Hugger, which I believe to be true, which I believe his findings to be true.

So Dr. Stonnington particularly is basing his

opinion on his own ipse dixit, and to the extent there's any science at all that's verifiable, repeatable, it doesn't go anywhere beyond simply, again, McGovern. And, again, Dr. Stonnington doesn't address the confounders whatsoever either.

One of the critically important things about each of these three experts, their credentials notwithstanding, is that the opinions they're expressing about the infection and Bair Hugger are being expressed for the first time in the context of this litigation. They never published that anywhere before. I couldn't find a speech where they ever said that. These are opinions being expressed for the first time in litigation.

So turning to the general causation question, whether the Bair Hugger causes prosthetic joint infections, and what is the generally accepted view in the scientific community on this question? So I wanted to walk Your Honors through that by first talking about certain types of studies, and I won't spend much time on them because these studies don't exist in the plaintiffs' hopper to meet their burden.

But, first, I have some agreement about what the patient warming benefits are, Your Honor, I wanted to put this up first. And so here is what the various studies would be addressing. The benefits of the Bair Hugger that's

shown to not increase but to decrease surgical site infection, to decrease the incidences of fatal heart attacks, of blood transfusions, length of hospital stay, post-operative shivering, and those are the benefits of intraoperative warming, the benefits of the Bair Hugger. So when you talk about patient warming generally, it, to me, can't be ignored that the overwhelming majority of patients in America are being warmed by the Bair Hugger, well in excess of 70 percent of them.

So what's the gold standard for epi studies? The gold standard in the testing of pharmaceutical or other agents is a randomized, double blind, cohort study in which the control and intervention groups are perfectly matched. There won't be any of that in this. There are no gold standard or either epidemiology studies beyond McGovern that plaintiffs rely on. For clinical studies similarly randomized trial, clinical trial or true experiment is considered the gold standard for determining the relationship. And as Your Honors can see here what the standard is for the gold standard in clinical studies.

So I wanted to just touch on for just a moment what the primary endpoints are and sort of the hierarchy of studies, how do they all fit? You know, the primary endpoint of being infectious, studies that show in the real world the Bair Hugger causes infection. These secondary

things don't quite get you there. There's still an analytical gap between increased bacteria between -deposition of bacteria in the would, correlation of bacteria with species in the wound, those are the so-called biological plausibility studies. And then a step below those are counting particles, presence of bacteria on surfaces, et cetera, air temperature differences, et cetera, we call tertiary, and those fall short of also.

As so Your Honors can see, I've also just stated that but a different way from biological plausibility on down. And I showed you these to point out that plaintiffs' studies all fall within this bottom category, exploratory studies that lack clinical relevance and have no predictive value. The most you're going to get from a study counting particles is a hypothesis for doing another study. It doesn't actually prove causation.

And what I will show Your Honors is that when these exploratory studies were done, the particle counts and so on, that these studies were in vision at the time to establish something other than proof of causing surgical site infections. And I'll show you when those were first kind of masterminded by Scott Augustine and along with Mark Albrecht who's at the root of all the studies that plaintiffs rely on and you can go to right to the epicenter when he's talking about them and what they intended to show

and what they're not intended to show, meaning surgical site infections.

Noel's question earlier, there was Kurtz and Melon, two of those, one in 1996, another in 2001 that were comparing patients warmed with Bair Hugger to patients who weren't warmed at all. And this is where -- and these clinical studies, clinical trials, the conclusion was that the Bair Hugger actually reduces surgical site infections, all of has been made about what 3M didn't do. This was done. Tests were done, peer-reviewed studies, and there they are.

Biological plausibility studies, all of these studies which are testing whether or not there is an increase in bacteria in the operating room or they can culture bacteria from the Bair Hugger blanket have been used properly. Mr. Ciresi just spoke about how expensive, how frightfully, terribly, horribly expensive it would be for the plaintiffs and the experts to have to undertake a study. It's as simple as getting a petri dish, putting a petri dish and agar plate in the room, turn it on, it's designed to catch and capture bacteria, and so easily could have gotten one of those for less than a hundred dollars and so certainly would not have cost them, you know, tens of thousands of millions, Your Honor.

So these studies have been done. Three, six, nine

of them, one as late as this year, where they are testing whether or not you could culture viable bacteria from the Bair Hugger. These studies we think are extremely significant to the argument over particles. Particles are substitutes for actual bacteria.

And this case I can't say enough is not about abstractions, whether abstract in the environment of use and abstract in the environment of use in the OR there particles and particles carrying bacteria. The question related to the general cause question here as to whether the Bair Hugger causes surgical infections is whether there have been any studies that have examined particles from a Bair Hugger and have actually been able to culture any bacteria from those. Not theoretically, not abstractly, but in fact.

And not only have there been not nine studies that have looked at since from 1991, all of which have come back and said no, there have been so-called secret studies that Your Honors will learn that the reason we end up with these exploratory studies of particles and bubbles and so is because they first tried in the secret studies could not culture any bacteria in the room or in the agar plates and so it didn't want to do that again and so it turned the sites into doing things they could train and use as proxies for marketing purposes, and that's how those studies came about that are the plaintiffs' additional reliance studies.

And it's avoiding the biological plausibility question.

And I wanted to just show you all, Your Honors, this OB study because it just came out this year where the question was airborne bacterial contamination during orthopedic surgery with a normalized control pilot trial.

And Your Honors can see here it was a peer reviewed that showed no association between Bair Hugger use and increase in airborne bacteria. And this study compared airborne bacteria sampling results between the HotDog and the Bair Hugger system during -- and in orthopedic surgeries, and the authors concluded it was not possible to detect any higher bacterial counts on any plate in the forced-air warming group versus the resistive warming group.

And it goes on to say that patients were randomized which there was no randomization in McGovern, with excel random numbers to intraoperative warming with either of the systems. This is simply how they went about the study. And important finding in that study was the type of patient warming did not influence the amount of bacterial sedimentation on either plate.

MAGISTRATE JUDGE NOEL: Who sponsored this study?

MR. BLACKWELL: Your Honor, it was done by a

Dr. Oguz, and if there was a sponsor beyond that, Your

Honor, it wasn't 3M, but I couldn't answer that beyond that.

MAGISTRATE JUDGE NOEL: Okay.

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                 THE COURT: And that was published in what?
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                 MR. BLACKWELL: In the Journal of Clinical
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       Anesthesia, Your Honors, and the Oguz study. And but again,
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       this is really underscoring the overarching point that if
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       the plaintiffs are going to talk about particles, they
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       should in the same breath talk about the study of particles
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       from the Bair Hugger that found bacteria that could be
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       colonized, and since there's been a study of this many times
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       then where is the proof and if relies only on ipse dixit,
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       then surely there must be some found, and in the real world
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       there haven't been any.
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                 THE COURT: Okay. Were the medical experts --
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       plaintiffs' medical experts asked about this study or did
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       the study come out after they were -- what did the
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       plaintiffs' experts -- what did Samet -- do you call him
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       Samet or Samet?
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                 MR. BLACKWELL: Samet, Your Honor.
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                 THE COURT: And what did SJS have to say about
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       this study, if anything?
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                 MR. BLACKWELL: If I may have just a moment, Your
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       Honor, just to --
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           (Counsel conferred.)
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                 MR. BLACKWELL: So Your Honor, I did, as you can
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       see, conferred with my colleague, Mr. Gordon, who talked to
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       them and that -- and said that the study was addressed and
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discussed and the experts simply said it didn't change their opinions with respect to the Bair Hugger causing surgical infections. And if -- and the plaintiffs will perhaps better speak to it, but our recollection is from the depositions they were asked about it, and they said it didn't change their opinions in the case.

THE COURT: Bear with me, I'm about to ask a question I might not -- I'm just formulating. It might not make sense. But I'm thinking about any potential difference between Minnesota's Frye-Mack standard and the Daubert standard, and it strikes me that --

MR. BLACKWELL: Oguz.

THE COURT: Oguz might be a statement of what is generally accepted now because it's a kind of close to a gold standard, purports to be kind of -- and I'm not familiar with this thing at all so all I know is what I just see here. Maybe it was in the materials and I just didn't get to it, but can you just talk about from a legal standpoint any differences between Daubert and Frye-Mack in terms of what is the appropriate use of a study like this or also the I guess that would also include the 2013, 400 experts from around the world meeting in I'm sure a very nice place.

MR. BLACKWELL: What does Frye-Mack under Minnesota Rule 702 or Daubert under 702, I think the

infections.

conclusion is they essentially merge with respect to Oguz.

This is a biological plausibility study and as such, it isn't viewed as a gold standard study because it's not even epidemiology and it's not a clinical trial. So establishing only biological plausibility still leaves a gap to show that that biological plausibility will turn into causing infection in fact.

THE COURT: I see.

MR. BLACKWELL: So what we see here from Oguz and the organization of the prosthetic surgeons, etc., the international consensus is that it is not generally accepted in the scientific and medical community that the Bair Hugger causes -- it's not accepted that it causes surgical

Now, under Minnesota Frye-Mack, that more or less should end the inquiry. It is not generally accepted.

Under Daubert and in 702, it is simply a factor in the analysis that the Court should consider.

MAGISTRATE JUDGE NOEL: Just as a -- not to put too fine a point on it, but as a legal matter it's possible that Judge Leary may come to one conclusion under Minnesota law and Judge Ericksen come to a different conclusion under federal law. That's a possibility in light of the way this has been teed up. Is that a correct statement?

MR. BLACKWELL: Your Honor, that is a possibility,

though obviously we wish you wouldn't.

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MAGISTRATE JUDGE NOEL: You don't see it.

MR. BLACKWELL: Right, Your Honor. I get that because the inquiry under Frye-Mack is really somewhat of a subset analysis from the one the Court may consider in Daubert. We think on the facts of this case they would be the same to the extent that Daubert allows for the consideration of other factors, those other factors relate to there being other reputable science, scientifically valid proof of causation. And when you look at what they in fact have as scientifically valid proof of causation, they only have theoretical studies. They have a CFD. They have reliance on McGovern. And beyond that they have just a lot of lawyer argument and accusations about what 3M didn't do and so that somehow helps them meet their burden to show what they in fact did do. And I think based on -- the difference to me is abstract and theoretical, but on the actual facts of this I think they come out in the same place because there's no there, there. The science here, to some extent, is like a Potemkin village. There's nothing behind it.

So continuing on, and so here with Oguz, we see the conclusion that Oguz and from the nine published studies over the past 25 years put here under the heading of what's generally accepted in the scientific community. What's

generally accepted is, is that there is no evidence that particles coming out of the Bair Hugger result in the creation or formation of bacteria. If the plaintiffs want to get up and talk about particles, the only relevant question is what study do you have of a particle that was able to colonize bacteria from the Bair Hugger and hasn't it been studied? And then where's your study if it's to the contrary? And Bradfrod Hill doesn't get you there because we only reach Bradford Hill after there's been the proper positive association finding, according to the Reference Manual on Scientific Evidence.

So as I said here, when I talk about -- this is just a couple of cases on the whole issue of biological plausibility, Your Honors, and In Re Zoloft where this came up, where this says plaintiffs potentially admissible supports no more than an association between Zoloft and certain birth defects, causation may be based on mere possibility. In Re Accutane, it flat out says, biological plausibility is not proof of causation. And then Bausch & Lomb, the suggestion of biological plausibility is insufficient to demonstrate causation. The same points that biological plausibility is in of and by itself is not sufficient.

So I want to switch gears for a minute and point to the exploratory studies and what --

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                 THE COURT: What --
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                 MR. BLACKWELL: I'm sorry, Your Honor.
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                 THE COURT: We're going have to take a break.
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       doesn't have to be right this second, but we've been going
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       since about nine clock and it's approaching 11 so.
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                 MR. BLACKWELL: This is a good point, Your Honor,
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       to take a break.
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                 THE COURT: When you said "I'm going to switch
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       gears," what I heard was break time. All right. So we'll
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       -- you want to know exactly how long, ten or so minutes. We
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       won't come out until somebody comes and makes sure that
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       you're all back in your places.
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                 MR. BLACKWELL: Ten minutes is plenty for us, Your
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       Honor.
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                 THE COURT: Okay. All right we're in recess.
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       Many.
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           (Recess taken from 10:45 a.m. until 11:07 a.m.)
                 THE COURT: Please be seated. We're back in
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       session. And I'll just let you know in advance that Judge
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       Noel is going to have to leave at around 11:30. He's got
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       criminal duty, and I offered to let him take somebody into
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       custody if that's what it is, so whoever is talking at that
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       point, don't take it -- or do take it personally. I'm just
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       telling you the facts.
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                 MR. BLACKWELL: Thank you, Your Honor.
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THE COURT: Mr. Blackwell.

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MR. BLACKWELL: When we left off before the break I had started to talk about the so-called exploratory What's important, first and foremost, to note studies. about these studies is that the date of them. They all are relatively recent. The vast majority of them postdate even all of the biological plausibility studies I showed Your And certainly they postdate by quite a few years the first clinical trial in 1991. And I point those dates out for reasons that will become apparent in just a little bit as to why these studies were created, why do particle studies, airborne studies, bubble studies in the face of all of these biological plausibility studies that have already been done that had turned out negative, so why not first establish biological plausibility since that is obviously a huge scientific question if it's to be believed that the Bair Hugger causes surgical site infections but instead turn around and start doing these theoretical exploratory studies in response?

And we'll show Your Honors momentarily these were done primarily to get results that could be used for marketing purposes and not for purposes of proving actual causation in fact of an infection caused by Bair Hugger is the main thing. But in any event all of these studies, which were part of the plaintiffs' reliant studies in

McGovern as a kind of bubbles and component to it, none of them conclude that they established a causation between the Bair Hugger and an infection.

So as Your Honors have seen this before, all of them ultimately conclude that no causation, we showed this at science day, so this is plaintiffs' science. And one the of things that's extraordinary about this case is that the plaintiffs are advancing the theory that the Bair Hugger causes surgical or prosthetic joint infections, and the very studies that they have relied upon disclaim causation.

So I wanted to, and I won't dwell on the FDA

letter, I talked about it before in the opening, but there's
one aspect of it that I did not show Your Honors where the

FDA says what it looked at, before it sent this letter dated
August 30, 2017, and here it says to determine if there's an
increased risk of surgical site infections when forced air
thermal regulating systems are used during surgery, the FDA
collected and analyzed data available to date from several
sources, including medical device records received by the
agency, information from manufacturers and hospitals,
publicly available medical literature, operating room
guidelines, and ventilation requirements. It's a broad
enough search that they undertook, and they said that after
a thorough review of available data, the FDA has been unable
to identify a consistently reported association between the

warranted? When is it not clinically warranted?

use of forced air thermal regulating systems and surgical site infections and they recommended the continued use of thermal regulating devices, including forced air thermal regulating devices for surgical procedures when clinically warranted.

So I want to stop with that segment and now speak with Your Honors. I'm sorry, Judge Noel.

MAGISTRATE JUDGE NOEL: I was going to say, do they give any guidance anywhere as to what, quote, clinically warranted means? When is it clinically

MR. BLACKWELL: They don't in the letter itself.

And it's physician obviously determination, but given the body of science that exists for all of the benefits of patient warming from, you name it, from reduced surgery site infections to fewer adverse health consequences of surgeries in general, it is now the standard for patient care. And you won't see very many studies of the sort that existed in the early 1990's because it is so accepted that patient warming is the standard now that you wouldn't have a comparison group of somebody not being warmed compared to someone who is, but the FDA doesn't specify, clarify in its letter.

I wanted to take a moment to show that in fact in the general scientific and medical community that the

plaintiffs' theories being espoused here are in fact rejected in the community.

And if I could, just to tee this up, Your Honor, I have a graphic that I'll go through very quickly because this may be just a big note version of scientific medical causation. So we have on the far left the experimental, which is theoretical, that's the bubbles and the particles and so on which can never be sufficient proof of actual causation because they don't prove that anything causes infection in the real world alone. The biological plausibility studies, which we looked at, those that don't establish causation in fact. Valid epidemiology can establish at least a positive association to which there may be applied Bradford Hill factors if there's a valid epidemiology to do it.

And what is ideal, and this is in the middle is the sort of chasm, the analytical gap or leap between these types of evidence on the left and actually valid proof of causation, scientifically valid proof of causation, the Glastetter standard on the right side, and the chasm in the middle is the abyss into which scientifically invalid proof of causation, you know, plunges.

THE COURT: Are those waves?

MR. BLACKWELL: Those are waves, Your Honor. No fish and sharks but definitely waves. So if I may, I'm just

going to pull this all up at once just to show which things fall under which. The plaintiffs have particles, bubbles, and CFD, that's way on the left, for experiment also slash theoretical. Biological plausibility are studies that actually test whether the Bair Hugger is releasing bacteria in the OR or increasing the quantity of bacteria in the OR. There's not that. And epi, there's various types of epidemiology studies. And simple argument is they don't have to have epidemiology, it is not really -- shouldn't be tantamount to an argument they don't have to have anything or that we could simply have particles and bubbles.

And obviously we talked about gold standard, gold standard types of epidemiology and clinical trials before, but the point here is that the plaintiffs are relying on the particles and the bubble studies and the litigation CFD created in litigation, and they're relying on McGovern. And McGovern, we will take a deep dive on that, but McGovern disclaims a causal basis for any positive association. They don't have epidemiology, they don't have any biological plausibility studies, they don't have any gold standard proof of causation, and so that leaves us talking about particles and bubbles, et cetera.

And so that's where we are. I wanted to tee this up because there may be other arguments that Your Honors hear where we'll we point out which box we're talking in at

a given time when we're talking about the evidence. I'm going to -- going through this, we just talked about international consensus standard just before the break where this particular body came down on sort of rejecting the claim, at least saying that there is not science there that shows an increase in SSI's related to the use of forced-air warming devices, but then there are a number of other independent reviews that find there's no link between forced-air warming and surgical site infection.

And I wanted to review a few of those with Your Honors, and the first being, Your Honors, from ECRI, and ECRI is a very respected I call it a pure science organization. They -- it's nonprofit. They follow evidence-based medicine. They provide support to and for some several thousand entities, including state and federal governments in and in governments even outside of the United States, amongst others.

And as you can see here, ECRI had been made aware of the allegations in this lawsuit, contamination by forced-air warming in April of 2013. And ECRI undertook review of the literature. They learned in March 2013 about the complaints filed here. They have reviewed the plaintiffs' petition. It doesn't present any new information that would alter the conclusions we have drawn in this article. And what they in fact conclude is that

there's insufficient evidence to establish that the use of forced-air warming systems leads to an increase in surgical site infections compared to other warming methods.

And I wouldn't stop at ECRI because we also have the Journal of Bone and Joint Surgery, which, again, is a peer review journal in the field of orthopedic surgery, and here they find in December 2014, Thus the literature appears to indicate that forced-air warming can impact laminar flow under certain very specific conditions but any actual clinical impact on surgical site infections must be considered unproven at this time. So the stuff that -- distributing air flow and so on, does it clinically result in an increase in surgical infections, again, looking at the Bair Hugger, they said the science wasn't there.

AORN, which is the Association of Perioperative

Nurses, and they represent some 41,000 RAM's across the

country, in October of 2013 looked at the issue also, and

they said our review uncovered no conclusive evidence that

the use of forced-air warming increases the risk of surgical

site infections. The evidence also doesn't support the

concern that use of forced-air warming may cause an increase

in bacteria near or on the patient or cause unwanted air

flow disturbances.

So I'm showing this to Your Honors to give you some sense of what the scientific medical community is in

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       fact saying. This isn't a neutral issue. They are
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       addressing the issue. They are rejecting the issue. And
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       quite generally. In fact, if there is a reputable health or
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       patient organization that's come out in favor of the theory
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       that plaintiffs espouse, they will point to it when they
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       stand up here. We're not aware of any.
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                 THE COURT: Could I ask about the AORN journal?
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       think the plaintiffs in their papers refer to that as an
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       article by a nurse, is that -- what is that article, the
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       AORN journal? It says "we." Was there a study or something
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       done, or was that --
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                 MR. BLACKWELL: Simply review of literature.
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                 THE COURT: By a nurse or by?
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                 MR. BLACKWELL: Can you see there?
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                 THE COURT: Who did it?
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                 MR. BLACKWELL: Yeah, let me find out who did it.
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       They're saying a Ph.D., professor of nursing did it, so it
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       was a professor of nursing. That's a Ph.D., professor of
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       nursing.
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                 THE COURT: Okay.
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                 MR. BLACKWELL: But certainly an independent
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       review, and they're to be reviewed and reacted to, but it's
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       consistent with everything else that's out there, including
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       studies that in fact specifically looked at McGovern, the
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       idea that McGovern stands for the proposition that the Bair
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Hugger is causing infections.

Dual Infection Control Outreach Network, DICON, looked at this issue and now in analyzing McGovern, and this is how McGovern is viewed in the general scientific community. Not adequate power, not properly controlled, not statistically significant. No adequate power, properly controlled, statistically significant, reproducible study has been published demonstrating an increased risk of SSI due to the used of forced-air warming, and that was the reaction to McGovern is that it is not such a study in part because of the improper controls.

And back to the Journal of Bone and Joint Surgery, this medical journal, peer review medical journal, in the field of orthopedic surgery will recognize McGovern failed to account for age or medical comorbidities, failed to account for other infection control measures implemented during study period, and co-author was employee of conductive warming company was the criticism from the Journal of Bone and Joint Surgery.

ECRI again weighed on McGovern, and ECRI found the study lacked documentation of normothermia during surgery.

Two types of warming were not applied concurrently. The data was collected retrospectively and noted the changes in antibiotics and thromboprophylactic regimens which was the antibiotic and the blood clotting regimens that changed in

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between the two test periods between the HotDog and the Bair Hugger.

The FDA weighed in on this issue too because Dr. Augustine was apparently making claims drawing from the McGovern study, and it came to the attention of the FDA, and the FDA wrote to him and that's what this letter is, December of 2012, where the FDA says, "The evidence provided in support of such clinical claims does not satisfy the requirement for a pre-market submission for a cleared intended use for the HotDog patient warming system or provide conclusive evidence of a causal relationship between the use of forced-air warming and higher infection rates, nor does it demonstrate a clinically relevant comparison between the use of the HotDog system and forced-air warming in general or the HotDog system in particular. Prospective, well controlled, well designed studies are needed to provide the evidence needed to support a reduced infection rate claim and a comparative claim." This is all a part of the FDA's efforts to ask Dr. Augustine to stop making those kinds of claims.

THE COURT: Is this a warning letter that's referred to in the first line there?

MR. BLACKWELL: Yes, yes. They issued a prior warning letter to Dr. Augustine, and he was supposed to have taken actions to have complied with it. Now they're

reviewing kind of what he had done in response to the warning letter and found that they had not gone far enough. And then he said to the extent he's touting McGovern as even a clinically relevant comparison, it's not even that, and if a proper study was to be done, the last sentence highlighted there is what type of study would needed to have been done which McGovern was not.

So stopping there, Your Honor, I showed Your Honor this before about what type of observational study would do, if we talked about studies that were rejected, what type of science would suffice? Proper observational studies would suffice, proper epidemiological studies would obviously suffice, clinical trials would suffice, none of which exist, none of which do we have here. Biological plausibility doesn't, but they don't have that here, and exploratory studies certainly don't.

So one other point here on observational studies as it relates to confounders is the second bullet point that I put here for Your Honors to see from the Reference Manual on Scientific Evidence that what the association found in a observational study, it must hold, even when effects of confounding variables are taken into account by appropriate methods; for example, comparing smaller groups that are relatively homogenous with respect to the confounders. And that is fatal to using McGovern in ways that transcends its

bounds given its limitation and the fact that it did not address the issue of confounders.

There must be a plausible explanation for the effect of the independent variable. Alternative explanations in terms of confounding should be less plausible than the proposed causal link. So all of this is from the Reference Manual on Scientific Evidence for what's a proper observational study.

So when we talk about the types of evidence, here's a quote from *Glassteter* and the types of evidence that the plaintiffs proffered there. Here they talk about the particle studies, arguments from lawyers, et cetera, corporate statements. "Viewed in isolation, Glassteter's different pieces of scientific evidence do not substantiate our experts' conclusion that Parlodel can cause intercerebral hemophage, strokes. Likewise, we do not believe that the aggregate of this evidence presents a stronger scientific basis for Glassteter's supposition that Polydol can cause these strokes." And that -- and so this, putting all the evidence together, saying this isn't just an individual piece but we'll put it all together.

And in the *In Re Lipitor* case is even more to the point. "To be sure, it's possible for the entirety of the evidence to support an opinion even when individual pieces of evidence are not sufficient in isolation, but it's also

1 possible that multiple piece of insufficient evidence add up 2 to insufficient evidence." 3 And so we saw the quote earlier from Bausch & 4 Lomb, I won't repeat it. 5 So I told Your Honors that I wanted to turn your 6 attention to the manipulations of sorts that are behind the 7 particle, the exploratory studies and how they came about 8 that the plaintiffs are relying upon. And that's the 9 segment I'll spend a few minutes showing Your Honors at this 10 point. And first, we know a bit about the Augustine-Albrecht connection, but as Your Honors can see 11 12 here, it goes beyond just knowing each other. They have a 13 promissory note relationship that is an addendum to the 14 first promissory note dated September 27, 2007, and in 15 August 2010 between Albrecht and Augustine, but here's the 16 real kind of punch line to this. And I'll pull this --17 THE COURT: I suppose I could look, but how long 18 did the relationship between Albrecht and Augustine, when 19 did that conclude, if ever? 20 MR. BLACKWELL: I don't know that it's concluded 21 to this day. Do we know if it's concluded? 22 (Counsel conferred.) 23 MR. BLACKWELL: Pardon. Mr. Goss said that 24 Albrecht testified that to this day he doesn't know for sure 25 if he still owes Augustine money on this note, so they may

still be in some form of relationship, but certainly through all of the McGovern period and the studies at issue here they were in relationship.

THE COURT: Because some of his I guess he only put that disclaimer in the one study, it's not in the other one, so it's not that he didn't have the relationship anymore?

MR. BLACKWELL: Yes, that's correct. And even more to the point here, it isn't just that Albrecht would have stood the financial benefit. What this is pointing at here is that if he didn't agree to a certain number of studies for Dr. Augustine, he would have to pay back \$21,000 currently owed within 60 days of the term to stop work, and some of those studies, the three you see, some here in the A, B and C are studies that are in the plaintiffs' reliant studies materials for their particle stuff, but there's a real connection there.

But I had drawn Your Honors' attention to some of the dates on the biological plausibility studies, and we look at the dates on the exploratory studies, and here's Scott Augustine writing to Mike Reed, one of the study authors. And here he's saying, this is talking about doing these particle studies, these bubble studies in the face of there being biological plausibility studies out there, and he says, Scott Augustine, I like this plan of doing the

studies because we know the outcomes before we do the studies and yet they are scientifically and clinically important questions that need verification in multiple studies. I should mention that when we repeated the experiment of tracer smoke, et cetera.

And so the point here is that this is the very opposite of the scientific method that's being employed because they don't start with the scientific question and follow it blindly to its conclusion; they start with the conclusion and then turn around and look for a path to it.

And here that's the very opposite of what you should do. And Dr. Fogel In Re Accutane did the same thing, showing a bias of wanting to reach a conclusion which is not right. So what that makes clear is why not do biological plausibility? He says, I'm personally not too excited about culturing the wound at the end of the case, even directly by irrigation where you get bacteria then. This is a crap shoot that could go either way.

I think it's important to consider that even if this type of study were to turn out positive, it could be considered to simply -- to simply be another intermediate step similar to particle detection over the wound. In other words, and this is the real punch line about these exploratory studies that Dr. Augustine is behind, it does not conclusively answer the question does forced-air warming

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cause wound infections? Therefore, I'm not sure that it really adds enough to our case to take the risk of a negative study to get to the real scientific question. And so the real kind of punch words here is these exploratory studies are intermediate steps. They even referred to the particle detection as an intermediate step and intermediate in the sense that they don't answer the question does forced-air warming cause a wound infection? So it would have been very simple, again, to use an agar plate to test whether there is any biological plausibility, do any particles associated with the Bair Hugger contain bacteria? Real easy to test, agar plate. And so the fact is, years before they did these exploratory studies from what Mark Albrecht calls the Augustine Publication Factory --THE COURT: You look for a really good picture of him to put up there? MR. BLACKWELL: That is one, Your Honor, there you go. You should see him in the morning. And so I'm not sure where they came from actually. So 2007, 2008, this is a few years before they did these bubble and particle studies, they had actually gone to a hospital in St. Cloud and Alexandria and Northfield and Hastings to try to measure airborne bacteria to gather whether any particles from the Bair Hugger actually contain

any bacteria, and they found no differences in Bair Hugger count -- I'm sorry, bacteria count with the Bair Hugger on or off and no bacteria in the air coming out of even the Bair Hugger hose.

So in 2009, McGovern and Reed simulate surgeries to analyze whether use of Bair Hugger could increase bacteria around the operative field. Not particles, actual bacteria. The experiment showed no notable increase in either the ambient particle count or bacterial count in the vicinity of an operative field when a forced-air warming device was used in the normal intraoperative manner.

Legg study in 2010, tried to identify if there was any increased bacterial level associated with the Bair Hugger by using a slit sampler at the surgical site.

Results, all samples came back with less than one CFU, colony-forming unit, the same level his hospital required for operating room air. So no different than background.

So this was already known about actually trying to find bacteria for particles before they decided to do these exploratory particle smoke and bubble studies from the so-called Augustine Publication Factory, as Mark Albrecht referred to it.

So here is the plaintiffs' science and how it translates into the studies that Dr. Augustine and Mark Albrecht that were behind, as Your Honor can see, no

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causation involved, bubbles, particles, particles, bubbles, temperature difference, particles, particles, bubbles, and particles. And what Your Honor knows about these studies already is every one of them came back finding no causation ultimately.

So enough on that, Your Honor. I'm going to now talk about the McGovern study as the study that Dr. Samet pointed to as the only one that shows an association in the real world which is what we're concerned about here. And as Your Honors have noted before, this -- I think there was a statement made before about the study authors standing by their opinions from before. Here is Mark Albrecht who's one of the study authors who's talking about Scott Augustine making claims from McGovern study, and he says this is one of those things where we an step close to the line and we do have important information to present that clinicians should be aware of but we also have to be careful that we do not state claims regarding proof of infection reduction. Unfortunately, Scott Augustine likes to say that he's convinced of such a relationship even though I tell him it is unsupported and I do not agree. Unsupported and I do not agree. And he says, well, that is the difference between research and marketing.

That is what the author, Mark Albrecht, says that any claims about infection reduction, which is what the

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       McGovern study purports to show, he has told Scott Augustine
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       that such claims are unsupported and that he doesn't agree
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       with those types of claims.
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                 Again, there is no question that once the
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       confounders are controlled for, and I just put here the
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       quote from Albrecht's deposition and that where he says he
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       didn't even need to run an analysis to know that there
       wouldn't be any statistically significant difference if the
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       anticlotting drug and the antibiotics were controlled for.
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       And, again, that fact I think is not in dispute.
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                 So with that, Your Honor, I will stop, and I want
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       then now to take the dive into the McGovern data which
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       Mr. Gordon will speak to, and I'll sit down.
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                 THE COURT: Thank you, Mr. Gordon.
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                 MR. COREY GORDON: May I please the Court,
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       counsel. Good morning, Your Honors.
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                 THE COURT: Good morning. Did you want to sit or
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       are you okay standing?
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                 MR. GORDON: I am okay standing.
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                 THE COURT: Because the podium will accommodate
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       the chair too.
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                 MR. GORDON: I appreciate that, Your Honor.
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       that changes, but hopefully I won't be up on my feet long
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       enough that that will be an issue. And if I am,
25
       Mr. Blackwell will give me the hook. Mr. Blackwell said
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that I would be plumbing the depths and getting into the weeds here, so I guess that makes me either a plumber or a weedwhacker, and my wife will tell you those are two skills I clearly do not have.

And I want to talk about -- and my goal here is to go deep, do a deep dive on the two so-called epidemiological studies that have surfaced in this case, the Augustine 2017 study and the McGovern 2011 study. And the reason I want to start with Augustine even though it's later in time is some information we learned about it fairly recently. It's a very recent study and therefore, there is some information that I think we have that's pretty useful to the Court.

Judge Noel had asked about, you know, where have I heard this before, essentially? And indeed he did. He got a prelude when we moved to enlarge the discovery time so we could take some discovery from hospitals. So he -- actually he's not missing -- he's not missing that much because he did get a little preview of this, but we did get some additional information from the hospitals that supposedly provided the data upon which Augustine's paper was based.

But why is the Augustine paper important at all?

Well, number one -- I was born in the 50's. Technology

ain't my thing either. Plaintiffs' counsel at that motion

to compel was saying no, no we don't need -- because our

experts aren't going to rely on it. Unfortunately, or for

better or for worse, Dr. Samet made it clear that he is considering the Augustine paper as supporting proof, you know. I asked him -- he volunteered it. Why, you know, how can you transfer this one study McGovern from one hospital in England back to the United State? And he said, well, it's useful.

But now there's a second report, that's from the United States hospitals, it has essentially a very similar quantitative assessment of the risk. And, you know, I asked him, did the Augustine paper have any impact on your opinion? Yeah, I regarded the paper as another piece of observational evidence that provides an estimate risk to deep joint infections associated with the Bair Hugger device.

So whatever plaintiffs' counsel want to say about it, I don't know how an expert unrings the bell. And to the extent that might even theoretically be possible, we haven't seen any supplemental report from Samet saying I got religion, I'm no longer relying on the Augustine paper. And I'm not exactly sure what the basis would be for saying he doesn't rely on it because the very indicia of reliability that he says allows him to rely on McGovern are present in the Augustine paper, indeed in some respects, they're on the surface there, even stronger. It's a peer-reviewed study. It's a — and in the case of Augustine, it's a multicenter

study of three different reporting studies that have some strength ordinarily in epidemiology.

It reports an even higher odds ratio. It's got more subjects. On its surface, all the factors that Dr. Samet says yep, I can rely on that, Augustine has it in spades, yet now they want to --- even though Samet says I've been relying on it, they want to turn away from it.

It also provides a lot of insight as to how Dr.

Samet, Dr. Jarvis, Dr. Stonnington, all the -- every one of the experts who rely on McGovern, how they go about their reliance materials. To use that Potemkin village analogy, I mean, those fans of 18th Century Russian history would know that Captain Greg used to float down the rivers and see those Potemkin villages along the river and think, oh, this is great, you know, my country is wonderful. They are moving down the river a little bit and they were continuously fooled. This is science. And Dr. Samet, Dr. Jarvis, and Dr. Stonnington were fooled. They like what's pretty on the surface and they don't dig below the surface.

And I think it's very useful for us to take a little bit of a deep dive below the surface because what lurks there is very illustrative and informative. And I'm going to borrow a quote from Mr. Ciresi, I wrote it down, I liked it, I'm going to enter into my pantheon, epidemiology

has been so misused. Let's see how misused. This is the Augustine 2017 paper where he says I'm going to compare Bair Hugger to air-free HotDogs, and here's kind of a quick summary of what his methodology. In the papers, hips and knees, and he used a one-year baseline for Bair Hugger, followed by a 60-day washout period when they switch over to HotDog, we're not going to collect data for 60 days because we can't tell which -- where the infection was going to come from, but then the 6 to 24 months of HotDog, those are the infection data we're going to compare to, important background for what he's doing.

This, again, would be what the peer reviewers would have had before them. So he says only hospitals reporting no other significant changes, so he's saying don't worry, no confounders, we've already taken care of that. He says we have a paid independent statistician performing statistical calculations. Guess who? Mark Albrecht. Paid in the sense that he had the sort of damaclies of the promissory notes hanging over his head. This study was a small letter C on that promissory note that Mr. Blackwell just showed the Courts.

He says the only independent variable, kind of backward way of saying no confounders, the only independent variable is the warming. And the most common brand, just lest there be any doubt, he's saying Bair Hugger was used by

all three hospitals. Okay. He doesn't identify the hospitals in this. We know what they are, A, from earlier drafts of this that were produced in discovery; and B, from this testimony of deposition. First one is Ridgeview Medical Center in Minnesota. The second one is the Orthopedic and Sports Institute, Fox Valley, I just shortened it to Fox Valley in Wisconsin, and the third one is South Nassau Community Hospitals in New York.

And I want to start with South Nassau. They responded to our subpoena. Their director of anesthesia provided an affidavit, and the first thing he said was we never use the Bair Hugger. Yeah, they were using a different forced air warming device, a Stryker warm air, but part of why he was shall we say nonplussed when he saw this study even though South Nassau wasn't identified in the paper, when he found out that that was the case he was not particularly happy. He didn't provide any knee data. Remember he said -- Augustine said it's going to be hip and knee data. He didn't provide any just -- and was in response to one of Augustine's sons who just asked him for some data. Not only were there not any changes, he said during this time period we were doing multiple things to decrease the infection rate.

So and I spared you the deep dive on the actual data because I wanted to just focus in on the data from

Ridgeview. This is how the data are presented in the Augustine paper. Again, this is what the peer reviewers would have seen. They would have seen that Augustine is claiming that in that two-year period of HotDog use there were two infections out of a total of 677 procedures. The way Albrecht does his statistical stuff is he disaggregates it. He did it in McGovern. He does it here. I reaggregated it just so you can see the numbers. Two out of the 677 in the HotDog and the forced air, that would be Bair Hugger, and that should be the 12 months immediately preceding the switchover but for the 60-day washout, six Bair Hugger infections out of 388, hip and knee, remember that.

Here are the actual data that Ridgeview provided.

There's to remind us of the two out of 677 and six out of

388. Where do these come from? Well, first of all, the six

out of 388 come from 2006 knees only. The switchover

occurred at the end of 2007, beginning of 2008, so what

Augustine did was for his one-year baseline, he picked 2006

for knees, skipped over hips, skipped over the year 2007.

For HotDog, he selected, again, just knees, 332 plus 345,

667, there's your two out of 677, so this is what he's

reporting. Had he followed his protocol with these data, he

would have, first of all, he would have reported combined

hip and knee, the one-year baseline of Bair Hugger would

1 have been 2007 and it would have reported 2 out of 537 or an 2 infection rate of .37, and he would have reported 6 out of 3 1007 HotDog procedures, total or infection rate of .60. 4 Now, using Augustinian analysis or 5 Augustinian-Albrechtian analysis, that translates to a 6 62 percent increase from Bair Hugger to HotDog, meaning that 7 you're well more than twice as much at risk if you have a HotDog then if you have a Bair Hugger. These numbers are as 8 9 completely preposterous and as meaningless as taking the 10 numbers that they manipulated in McGovern and as he 11 obviously manipulated here to say that there's a big 12 difference between Bair Hugger and HotDog in favor of 13 HotDog. 14 The point here with this, and I'm sparing Your 15 Honors the deep dive from the data on the other ones as 16 well, this whole thing is cooked. It's completely 17 fraudulent. The idea that Scott Augustine did an objective 18 study and he followed his protocol and he gathered these 19 data and he presented them made it look like there was a 20 78 percent reduction when you switch from HotDog to Bair 21 Hugger, it is a complete fraud, an unmitigated lie. 22 And as noted, who did the statistical analysis 23 under his direction? Mark Albrecht. This brings us now --24 JUDGE LEARY: Can you tell us anything about the 25 journal in which this article was published?

1 MR. COREY GORDON: Yes, it's an online journal out 2 of Italy, Page Press has a series of publications that they 3 pay 500 euros, 600 euros to publish in. 4 JUDGE LEARY: The author -- the organization that 5 wishes to publish the article pays the money to have it 6 published? 7 MR. COREY GORDON: That's right. There's been a 8 proliferation with the Internet of online journals, and 9 there's a -- they run the gamut of respectability to not so 10 much. 11 JUDGE LEARY: But would it be fair to stay that 12 this journal is a journal of self-published articles? 13 MR. COREY GORDON: It is essentially. 14 JUDGE LEARY: Is there any review of the 15 scientific validity? 16 MR. COREY GORDON: They say it's subject to peer 17 review. There's an unusual twist in that when you submit 18 your paper for publication, you are required by their rules 19 to provide them with the names of two potential reviewers. 20 Sometimes a lot of journals ask for suggestions. 21 require them, but they say it's peer reviewed. There's an 22 editorial board. 23 This is an important point, if I may, Your Honor, 24 peer reviewers can only review what is presented to them and 25 have to rely on the integrity of those who are submitting

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              There has been an explosion of peer-reviewed
       them.
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       published literature being retracted after it was uncovered
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       that there were problems with it. And this is not just
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       online journals, although online journals tend to be
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       disproportionate. Some of the top journals in medicine are
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       plaqued with this as well. One might attribute it to the
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       pressures of --
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                 JUDGE LEARY: I'm not really that interested in
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       the --
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                 MR. COREY GORDON: I apologize.
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                 JUDGE LEARY: -- general situation with regard to
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       self publication. I'm concerned about the scientific
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       reliability of the journal in which this article was
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       published. And if you don't know, that's --
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                 MR. COREY GORDON: Well, I do. It has an impact
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       factor that tends to be between about two and three, which
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       means it's not in the junky of journals, it's not in the top
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       tier of journals. It's probably closer to the junky but
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       wouldn't it characterize it as the journal -- I'm not
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       faulting the journal. I understand they are looking now at
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       this information, and I would hope that they would --
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                 JUDGE LEARY: You've answered the question, thank
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       you.
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                 THE COURT: Does the article itself reveal the
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       skipping over of the 2007 -- what you just pointed out the
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       knee, you know, you've got the '06 knee and then nothing
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       from '07 and then --
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                 MR. COREY GORDON: Not at all.
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                 THE COURT: So that wouldn't be evident from the
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       face of the journal?
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                 MR. COREY GORDON: That's correct, Your Honor.
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       And that's the point, that on the face of it, you know, if
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       you look at that chart, wow, that looks pretty compelling.
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       You know, you've got three different places, they all show a
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       reduction when they switch from Bair Hugger to HotDog. You
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       combine the totals, you've got an odds ratio of 4.28,
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       conference interval of 1.5 to 12.9 and a P value of 0.0022,
13
       it's all fake.
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                 THE COURT: So you're telling us all this.
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       there a witness who says something similar? Is there a
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       witness who says it's not consistent with respectable
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       scientific methods to rely on a study like this and I -- is
       there a witness?
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                 MR. GORDON: Yes, two witnesses actually. There's
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       Professor Borak who, frankly, was the one to kind of unravel
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       this, at least with respect to Ridgeview, and so testified
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       in his deposition, but Dr. Samet, when we showed him at
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       least some of this, he hadn't seen it before. And I sort of
       my final question was, doctor, if this is true, would this
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       concern you? Would this trouble you? And he said yes, it
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would.

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THE COURT: Did he talk at all about whether in his non-litigation work, he would rely on a study like this? MR. COREY GORDON: Well, I'm going to answer that question slightly differently. We did address how in his published work he has talked about the need to rely, to have, you know, more than one epidemiological study, to have consistency, to show consistency across multiple studies, you know, similar to the reference manual quote that Mr. Blackwell put up. And he acknowledged that that's what he's written and that he stands by that. And, you know, I was asking him then how do you -- basically how do you just rely on McGovern? Well, he relies on McGovern because that's what was presented to him. I guess that's -- and that goes right to really it's the heart of the Daubert issue, you know, how does he do that? How does he look at one on its face --

 $\,$ THE COURT: He said he also relied on McGovern with others, including this --

MR. COREY GORDON: Well, but the only quantification of risk he acknowledged in the real world, those are his words, was McGovern, then a little later on bolstered by this, but you take away McGovern and Augustine and there is no quantification. It's all theory. It's all plausibility. You've got smoke and you've got bubbles.

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THE COURT: Right. So he specifically relies on McGovern for the quantification, so the statement of how much the Bair Hugger increases the risk, but Daubert wouldn't require a finding of a certain quantification, so to the extent the quantification relies solely on McGovern, that doesn't get you where your motion wants you to go, does it, because it's the ability to do it, the ability to cause the infection at all, not --MR. COREY GORDON: I think I understand what Your Honor is asking, and I think the answer is if there is some valid evidence of increased risk, the inability to put a specific number on what that increase is becomes a factor to consider. THE COURT: That was my question. MR. GORDON: Here, what he is saying, I asked him because in his opinion he said the Bair Hugger is a substantial contributing factor. I said so, you know without the quantification, can you still say it's a substantial contributing? No, I can't. Can you say it's insubstantial contributing factor? No, he couldn't. point being whether it does in fact increase risk at all is gone. THE COURT: I see. MR. COREY GORDON: But, certainly, yes, the need to be precise in quantifying it is relaxed, I guess, if

you've got something that shows it really does increase risk, but without McGovern and Augustine, they have absolutely nothing to show that it really does increase the risk. They've got theory. And in the face of that theory, there's a lot of solid evidence that their theory is wrong, but all they have to even get them to that point where you could invoke the Bradford Hill factors or whatever else they want to talk about, you got to have something to show there's a positive association. And the main horse they rode was McGovern. When Augustine came along out of the calvary, the calvary has arrived, the problem with the calvary, let's ignore that.

But now if I may, I'd like to do a little bit deeper dive, peel back the curtains, if you will, on McGovern. There's a lot on the surface of the McGovern paper that we will talk about as to why it, on its face, is unreliable, on its face should raise some red flags to Dr. Samet and anyone else who's trying to rely on it, but through discovery, we've learned a lot more about it. One of the things we got at the very end of our transatlantic sojourns when Dr. McGovern voluntarily appeared for his deposition was that he gave us his -- all of his electronic files on this study. Thousands of pages. And we weren't able to get that from any of the other English authors because they were all -- they were only appearing pursuant

to the order of the English High Court which, under their interpretation of English law, precluded us from compelling document production. We got their deposition, but they weren't required to produce underlying data or anything else related to the actual task, but Dr. McGovern gave us his whole file, electronically, and said that that's what it was.

And one of the things that was very interesting was there was an initial draft of the McGovern paper appears as -- it's designated manuscript read 1 PDF, I'm calling it McGovern draft 1, and the main things I want to point out was when they were drafting this version of it, they started out by saying that they're going to do a two-year study period from 9/1/2008 to 9/1/2010. And I just draw Your Honor's attention to the fact that 9/1/2008 is the way we Americans write dates; it's not the way the Brits write dates. They would have written 1/9/2008 or if they were trying to do September, they would go 1/9/2008 -- or 1/9 -- 1 September. So the point being that it's clear this is Albrecht.

But the main thing I want to I call your attention to in this one is their initial draft of Figure 7. Figure 7 looms large in this case. It's a version of Figure 7 ultimately is published. And indeed, in response to our pointing out that the plaintiffs have previously represented

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to the Court that Dr. Samet had reviewed all of the underlying broad data of McGovern, their response was, well, no, no, he reviewed Figure 7 as it was published.

Well, this is Figure 7 as it was initially drafted, and the two things I want to point out, number one, is again the start date is September 2008; number two, the way the line is depicted here is that it's not a flat line. It shows down and then up and that there's a clearly a very obvious hump where a peak of infections just before the switch over to HotDog. That peak of infection just happens to coincide with the seven months that they were using rivaroxaban and had such disastrous consequences with it that they switched back to the anticlotting drug they were using prior to that. But anyone -- so anyone looking at this as it is drafted had it been published this way, presumably could have at least scratched their head and said, gee, you know, the infection rates weren't constant over the Bair Hugger timeframe, they, you know, three percent down to two percent, then over a very short period of time skyrocketed to four percent, what's going on here? If it's the Bair Hugger, why wouldn't -- you know, why would there be these peaks and valleys, particularly this huge peek just before the switchover?

Well, they apparently thought well of that because in a very next draft, that line gets flattened out, but I

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       want to jump now to --
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                 THE COURT: Just leave that up for a second.
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                 MR. COREY GORDON: Sure. You'll see it again.
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                 THE COURT: So the dates are different, so the
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       Figure 7 as published has July of '08, January of '09, July
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       of '09, January of '10, and then we skip over, so it skips
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       that hump period, right?
                 MR. COREY GORDON: Well, no, the hump period is
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       included in -- in what they analyze as being the Bair Hugger
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       cohort. The graphic depiction of that hump disappears and
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       the scrunching, if you will, of the -- what they call the
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       jitter plot at the top, I don't know if your eyes are good
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       enough to discern the difference, but you can see that
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       there's a little bit of -- a cluster of infections at the
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       top and a sparsity in the middle of the Bair Hugger period,
16
       but there's no way to quantity --
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                 THE COURT: Oh, it's above the infection rate
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       grid?
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                 MR. COREY GORDON: Correct. On the left-hand axis
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       is the percentage. The bottom is a combination of the
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       timeline and that massive cluster of what looks like ink
22
       smears, supposedly the number of cases, the number of
23
       procedures, and then the dots at the top reflect the
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       infections.
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                 THE COURT: I see.
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MR. COREY GORDON: And I'm going to take a little bit deeper dive on that in just a second. And part of what was going on here, it's clear from the text, and I spared you that but it is in our materials, you can see from the text at the time they were writing this they had only 171 Bair Hugger procedures, meaning they had about three months of data, meaning September — they were basically up to September. And at that point, there were no reported HotDog, infections so, you know, you can't really do a very valid comparison of some number of infections to zero. So they were waiting to see if they had any infections in the HotDog period before they could do a comparison, and that came about by the end of December they had enough, they had seven months of HotDog data and they had some infections so now they had some numbers to report.

Let's see how they drafted that the version have, what I would call the penultimate version, McGovern draft 10. And this is, you will see from the numbers, that this is now based on the data that the final publication is based on. It just has that Augustinian magic applied to it. This is before the Augustinian magic has been applied. Okay. In draft 10 they show there are 372 HotDog procedures versus 1,065 Bair Hugger procedures. I know this is pretty meaty, and I apologize.

THE COURT: We can follow you so far.

MR. COREY GORDON: Following me one thing is.

Staying awake is perhaps a bigger challenge. But at this point they are reporting a percentage of infections in the HotDog period in that 372 group as 1.08. Back calculate that, that translates to four infections. The 3.1 over 1065, it's a little more ambiguous depending on how you round up, it could 31, it could 32, it could be 33, so that spells out the numbers for the Bair Hugger.

Now let's look at their Figure 7 as drafted in this penultimate version. You'll see that they -- as Your Honor pointed out in the final version, they moved that -- the start date back to July of 2008, and I'll give you I think a good explanation as to why that happened. But the key thing I want to point out here is in this scatterplot at the top in the HotDog only period are four infections, four dots. And you can see they flattened out the infection line so, you know, anybody looking at this would not be alerted to the fact that, hmmm, there was quite a peak there right before they switched.

And just for comparison, I'm going to go back and forth a little bit here. So we have these four infections. Now, to unravel this a little bit and see what was going on at the old --

JUDGE LEARY: Just for clarification, Mr. Gordon, are you saying that with regard to this draft 10, the flat

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       line, that's really misrepresenting the data?
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                 MR. COREY GORDON: Well, it represents it in the
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       sense that it's just an average. It's --
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                 JUDGE LEARY: So it's not plotted in terms of the
 5
       rate of infection at different points in time?
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                 MR. COREY GORDON: Correct.
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                 JUDGE LEARY: All that's been done with regard do
       draft 10 is to take the information and then average it
 8
 9
       across the length of time that the Bair Hugger was used?
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                 MR. COREY GORDON: That's exactly right.
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                 THE COURT: So why would you need it represented
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       as a rate over time if it's just an average?
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                 MR. COREY GORDON: Well, I mean, you wouldn't, but
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       if the average -- I mean, you know, how do with statistics,
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       the average of something that varies dramatically can appear
16
       to be pretty static, but when you have something that varies
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       dramatically, it suggests that there's something going on
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       here.
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                 THE COURT: I mean, how do you plot -- I don't
20
       know, maybe you're not the right person to ask this, but how
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       do you put on a grid for July of '08 and then your vertical
22
       axis says "infection rate percentage" and what you plot
23
       there is an average for things that haven't happened yet?
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                 MR. COREY GORDON: Your Honor, I must agree with
25
       you. I am not the right person to ask, and to the extent
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       you're asking me to --
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                 THE COURT: I just don't know -- all right.
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                 MR. COREY GORDON: I think that's pretty slimy
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       because just looking at that, it looks like, well, there's
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       been about three, a little over three percent infection rate
 6
       across 20 months.
 7
                 THE COURT: Right.
                 MR. COREY GORDON: And that's not the case.
 8
 9
                 JUDGE LEARY: Would it be fair to say that the
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       average that's represented on draft 10 for the Bair Hugger,
11
       the average infection rate would be less if you pulled out
12
       the spike in infection rates that might have been
13
       attributable to a change in regimen, antibiotics regimen?
14
                 MR. COREY GORDON: Absolutely.
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                 JUDGE LEARY: Is that what you think happened?
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                 MR. COREY GORDON: Absolutely. And in about four
17
       slides I'll show that.
18
                 THE COURT: Okay. Go ahead with your --
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                 MR. COREY GORDON: To further -- I just want the
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       Court to have a better understanding of what's going on
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       behind the scenes here. Mark Albrecht gets the data that he
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       uses to come up with draft 10 and Figure 7. This is his
23
       e-mail that he sends to his colleagues after he's done his
24
       preliminary analysis of the data. This is an e-mail
25
       January 31, 2011. The e-mail goes to Mike Reed, to Paul
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McGovern, and it also goes to Scott Augustine, pretty much everything goes to Scott Augustine, and Professor Nachtsheim gets cc'd on it. And he says at the top, Barely made it with those sample numbers. Attached is an updated chart of infection data. The difference is significant based upon the results of logistic regression. Some highlights. There have been 3.1 for forced air, N equals 1065 and 1.08 for HotDog equals, N equals 372. And boy, they're doing their happy dance. Okay. Hopefully we made it here to significant difference so I'll update the manuscript to reflect the new infection numbers.

Kind of an interesting way to do a study, to keep gathering data until you make it to statistic significance.

Boy, you got to cross your goal line and you do your -- I dont know, you do duck duck gray duck or for those of you from out of Minnesota duck duck goose. And duck duck gray duck is correct.

How does it get published? What happens? Well, this goes to Scott Augustine, right? And we've already seen what Scott Augustine thinks of the truth and the importance of adhering to scientific integrity. And just barely making it to statistical significance, just below P and having — and they've already calculated the odds ratio using — they didn't in that draft, but if you — the odds ratio of 3.1 to 1.08 percent would be about 2.87. And, you know, okay, the

confidence interval would be very wide and right about one but just barely significant.

Call me a skeptic, but this goes to Augustine and Augustine maybe thinks, hmm, you know what, it's good we show a positive association but it's not as strong as it could be. Is there a way we can just make it a little stronger?

Here's the published version. Remember that 1065? It becomes 1066. Remember that 372? It becomes 371. Remember the -- this time they specify the number of infections for Bair Hugger. This is interesting, they say 32 -- this is in the published paper, and they say that's 3.1 percent. No matter how many times you calculate it, 32 is three percent of 1066 which makes me wonder what the peer reviewers were doing, but that's really a very minor issue compared to the decrease in HotDog infections from four to three.

So here you have the comparison, the penultimate version, they sent it -- he sent it to Scott Augustine, we barely made it, 1065 versus 362 -- 372. On the 1.08 percent, we need four infections in HotDog. Published version, there's only three infections in the HotDog period, 371 versus 1066. So how did that happen? How do those four infections become three infections in the HotDog period? Well, we think we have the answer. Dr. McGovern in his

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voluminous materials provided us with an Excel spreadsheet. And we'll talk about this when we talk more about the Holford -- Dr. Holford's analysis and data upon which he did that analysis. But Dr. McGovern had the spreadsheet that showed all the infections, the dates, the age, the sex, the procedure for just the infections. It was an Excel spreadsheet that called out just infection as opposed to the master file, if you will, that had all the procedures, all 1400 or so procedures.

And what he did was -- you have to squint at this, we did a callout here, somebody, unlike the master set of data that had all those bits of information, including the infection data and the type of infection, there's one column that's added that isn't in that master set and that's a column that shows whether the codes as either become CFW, that's HotDog, or FAW, that's Bair Hugger. And you can see that the four dates that are shown here are 9/1, 9/15, 10/18, and 11/22. Those are all in the Bair Hugger period. In fact, they're well within the Bair Hugger period. The switchover occurred from March, April, and May, so it's completed by the end of May. From June 2010 on, they were using just HotDog. So September is well in the middle of -in fact, it's dead in the middle of the HotDog only period. Yet for some reason, September 15th, 2010, right in the middle of the HotDog only period, this one procedure gets

1 coded as being a Bair Hugger procedure. So what happens? 2 Well, and by the way, I just wanted to point out 3 that the -- all the data on McGovern 16 corresponds exactly 4 to the master set of data upon which Dr. Holford did his 5 analysis with the one exception of the 9/15/2010 having a 6 Bair Hugger coding. All of the other data are still there, 7 the British convention 15-9-2010, the age, the sex, the type of procedure, the type of bacteria, all that is identical. 8 9 It's not different because there is no warmer coding on the 10 master data. On this document, it gets coded as FAW. 11 how does that impact things? Well, those four that appeared 12 in the penultimate draft, they become three. What happens? 13 Well, one of them in the middle gets coded as FAW. 14 Now, one could say -- I suppose one could say when 15 then reviewed the data, oh, gee, I don't know how this 16 happened, but for some reason out of all of those 372 17 procedures that we did when we were supposedly only using 18 HotDog doing, for some reason on September 15, 2010, someone 19 just decided, well, let's use a Bair Hugger on this one case 20 and that one just happened to end up in an infection. 21 that's possible. But if that's the case, you would expect a 22 footnote, okay, here's a fourth dot on this scatterplot,

You would also expect there would be at least some

footnote, you know, for whatever reason, this one procedure

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was done.

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e-mail back and forth. And I'm going to anticipate what might be a question is what do the witnesses have to say about this? Unfortunately, when we got these documents from Dr. McGovern, we had already deposed Albrecht, we had already deposed Reed. We didn't have -- weren't able to ask them. Dr. McGovern, even though his name is on the beginning of this, is the first name on the study, he had already left the hospital. He was in his early stages of his residency. He left the hospital before the switchover even occurred. He was involved in the bubbles but he had nothing to do with, other than there's kind of a repository for all the e-mails back and forth, for the final aspect of epidemiological lead, interrupted time series, observational study. So I asked him why would there be a Bair Hugger procedure in the middle of September? I mean, well, yeah. And he said, which all he could say, of course, is I don't know.

So what's the impact of this? Moving one or re-coding one, moving back the start date, we didn't talk that much about that, but I want to show that. Remember they started out they were going to start in September of 2018 -- or 2008, and by the time they did this, they had bumped back two months. Well, okay, two months, more data, that's good, isn't it? Well, what happens is, and this is from Dr. Holford's chart -- or his expert report. He did a

1 month-by-month analysis of what would be the statistical 2 significance of any odds ratio depending on which month you 3 started the study, the red line being, if you will, the 4 statistical significance goal line. 5 THE COURT: Who did this? 6 MR. COREY: I'm sorry? 7 THE COURT: Who did this? MR. COREY GORDON: Professor Holford. He's our 8 9 biostatistical expert. And what he showed -- and by the 10 way, he used a chi-square for this analysis. If you're 11 lucky, you won't hear any more about it, but I'm afraid 12 you're going to hear more about a chi-square. 13 THE COURT: Well, the plaintiffs are going to say 14 it's a different -- the use of a chi-squared makes it kind 15 of an apples-to-oranges comparison. 16 MR. COREY GORDON: Yeah, that's basically what 17 they're going to say, and I'm going to keep you in suspense 18 to our response because it's close to lunch and I don't want 19 to put you to sleep. But the point is was a chi-square 20 analysis, and what he -- what he showed was kind of 21 interesting. If you start in September of 2008, you don't 22 cross the statistical significance goal line, but if you 23 start in July of 2008, you make it barely across the goal 24 line. So the start date is so sensitive in this study that 25 just moving it back two months moves it from not

1 statistically significant to statistically significant. 2 the way, moving it forward a month or moving it back more 3 than two months would obliterate statistical significance. 4 Moving forward one month for the first six or seven months 5 is still below significance. The sweet spot that they have 6 to use in order to achieve statistical significance was a 7 start date of July 1, 2008, and to gild the lily, they added 8 an additional -- they moved a HotDog to the Bair Hugger. 9 Now, maybe they switched --10 THE COURT: Let's just briefly -- and since Judge 11 Noel is not here, I'll say the 15 words -- or what'd he, 12 25 words or less, tell me why this is an admissibility, all 13 of this -- let's say this is all true, tell me why that's an 14 admissibility issue rather than a weight issue? 15 MR. COREY GORDON: That's -- obliterating this 16 little one right there, it's certainly weight versus 17 admissibility. Mr. Ciresi said, oh, this study has. You 18 know, confounders. That's true in an abstract sense, but at 19 some point a study becomes so fraught with problems, it's 20 just, it collapses. The whole point of the gatekeeping 21 function, if you will, or even Frye-Mack is, you know, is 22 there, there? Is there something reliable upon which the 23 experts can offer an opinion? 24 THE COURT: And --25 MR. COREY GORDON: And the start alone is not --

1 the moving the one infection, that's not it. 2 confounders --3 THE COURT: What is the legal standard for when it 4 drops below the -- when it becomes a matter of 5 admissibility? 6 MR. GORDON: Well, there are a number of cases, 7 for example, that say the opposite. There's no bright line 8 in terms of, for example, statistical significance. You 9 could have something that's statistically significant that 10 doesn't isn't -- that doesn't, you know, punch your ticket 11 and you get past the gate. Conversely, there are cases that 12 stand for the proposition that if you don't have, you know, 13 statistical significance, that is necessarily fatal. 14 it's not -- there is a certain totality of the evidence. 15 But, again, at some point, when you've got multiple 16 confounders, when you've got multiple flaws in the 17 methodology, when you've got disclosed confounders that were 18 not considered, known/unknowns we might want to call them, 19 when you've got undisclosed confounders, not considered, and 20 you've got pretty strong evidence of data miscoding, to be 21 charitable, manipulation to be more of an advocate, at some 22 point the data simply -- the study is not reliable because 23 the data have not been properly analyzed and properly 24 presented. 25 THE COURT: So it affects the preponderance that

1 is normally used in evaluating factual underpinnings of an 2 admissibility determination so it goes to whether there is 3 -- the plaintiffs can show by a preponderance of the 4 evidence that this would be reliable? 5 MR. COREY GORDON: I would guess that it's a 6 preponderance standard, but, you know, in our main -- most 7 -- you know, at least most cases I'm familiar with, the science doesn't -- isn't fraught with this kind of 8 9 underlying fraud and manipulation. And in this district, I 10 think the closest parallel would be the In Re Viagra MDL 11 where the Court originally permitted the expert testimony to 12 go forward based on a peer-reviewed study that had been done 13 by the proffered expert but then discovery revealed a lot of 14 problems with the underlying data and in revisiting that --15 the initial decision, the Court in that case excluded it. 16 THE COURT: All right. Thank you. 17 MR. COREY GORDON: I know it's 12:20 and I've got 18 a choice which means you've got a choice. 19 THE COURT: How many more minutes do you have? 20 MR. COREY GORDON: Well, what I was going to say 21 is the next stuff is about the confounders I can just as 22 easily do that in the Holford/Borak defense. It's entirely 23 up to you. 24 THE COURT: What's the thumbnail of what you're 25 going to say about the confounders? Are you going to talk

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       about the anticlotting?
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                 MR. COREY GORDON: Yep.
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                 THE COURT: You're not going to talk about the
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       obesity component?
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                 MR. GORDON: Oh, yes. Let me do the obesity just
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       before we go lunch, if I may.
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                 By the way, before I started working on the Bair
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       Hugger case I was 40 pounds lighted, so I'm going to say
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       there's a positive association between working on this case
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       and my now being obese.
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                 THE COURT: You were four pounds lighter?
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                 MR. COREY GORDON: Yeah. Well, I did have 2 foot
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       -- feet -- foot surgeries in between and, I don't know, that
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       may have had something to do with it, but that's just the
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       confounder.
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                 So back to McGovern, what do they say, they say
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       not unfortunately, but there are two unfortunatelies in
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       here, and this is the unfortunately about the antibiotics
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       and the thromboprophylaxis. And I'm going to skip over that
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       for a second to the second unfortunately. Unfortunately,
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       the record keeping was a complete -- this is what we would
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       call the patient-specific factors, blood transfusion,
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       obesity, incontinence, and fitness for surgery. Which have
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       been identified elsewhere as important predictors for deep
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       infection. That's an important sentence because plaintiffs
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and their experts want to say, well, before you have to think about confounders, you have -- first, there has to, you know, a priori determination that they have -- that they could be a confounder. Well, we have some disagreement over the details, but there's no disagreement that the authors of the study were saying, hey, these were identified as important predictors for deep infections, i.e., potential confounders, but they don't have any information. These are known unknowns. So were the Bair Hugger, would the Bair Hugger cohort a whole bunch more obese, incontinent, you know, people who needed blood transfusions? The biggest issue really is probably. We don't know, but fitness for surgery and the idea that fitness for surgery could be a really important factor that you have to consider, you don't have to take my word for it. Take Dr. Jarvis's word for it. When Dr. Jarvis was at the -- that's one of plaintiffs' expert. When he was at the CDC, they were called into a hospital in Tennessee to investigate an apparent problem with a cluster of infections in their knee surgery. And going in, they had the suspicion that it was one particular surgeon.

THE COURT: And he says we don't want to disagree so he went to the Nth degree, blah, blah, blah.

MR. COREY GORDON: They did a great job in

analyzing all potential factors, and when they did it, they found, yeah, the surgeon was statistically -- it was associated as statistically significant but so was fitness for surgery. This surgeon, for whatever reason, had a whole bunch more people with what's called ASA scores, they were high ASA scores compared to all of the other surgeons, so to compare apples to apples, you had to factor that in.

McGovern didn't do that. And they say that we didn't do that. And, you know, for that reason, just on that alone.

One more slide because I promised Judge Leary that I would get to this and I'm finally going to get to it.

When you slice out the change in antibiotics and the change in anticlotting drug, there was a period in between where they were the same for Bair Hugger as they were in HotDog.

In other words, they switched the antibiotics earlier then switched the anticlotting drug and then switched back. So by the time they got to the HotDog period, they were using a protocol that they had actually used in the middle, remember that graph that we saw on the earlier graph, Figure 7, when you slice it like that, there is no difference, zero difference in the infection rate.

Don't believe me. Believe Mark Albrecht who when we forced him to kind of go through this analysis conceded, yeah, that would not be, there would be no significance. In fact, he didn't need to run an analysis to know that it was

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       not significant.
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                 THE COURT: How much infections were there in that
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       seven-month period?
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                 MR. COREY GORDON: The seven-month period of the
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       HotDog either three or four, I believe there were three -- I
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       think there were three in the five-month period. I can -- I
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       like to be precise so, I mean, I'll -- I don't know if we
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       have that on a chart, so I can certainly provide that to the
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       Court after lunch.
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                 THE COURT: Okay.
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                 MR. COREY GORDON: But just, the point is, just
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       these two factors alone, if they had controlled for them,
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       there's no there, there. There's no difference. And this
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       also underscores just the huge impact that the anticlotting
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       drug when, and we get to Holford and Borak we'll talk a lot
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       more about that, but unless the Court has any questions, I
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       think I can actually end there.
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                 JUDGE LEARY: I'm good.
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                 THE COURT: So when we come back from lunch,
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       what's going to happen?
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                 Thank you, Mr. Gordon.
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                 MR. COREY GORDON: Thank you, Your Honor.
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                 MR. BLACKWELL: Your Honor, we will close before
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       lunch with our arguments on the exclusion of SJS, and then
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       as to whether the plaintiffs want to take them one by one,
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1 I'm presuming --2 THE COURT: I quess to be more specific about my 3 question, are you about done with SJS? 4 MR. BLACKWELL: Yes, Your Honor. I have only one 5 other thing to put up. 6 THE COURT: Okay. Well, why don't you put that 7 up, and then we'll -- welcome back. You know how I said before you shouldn't, I think 8 9 you should. So why don't you do whatever you're going to 10 do. 11 MR. BLACKWELL: Just this in closing, I put up the 12 final quote from Glastetter that I think speaks, to some 13 extent, the types of evidence the plaintiffs need here in 14 support of the plaintiffs' medical causation claim. 15 Although plaintiffs' chain of medical reasoning appears 16 sound, its major premise remains proven. Glastetter's 17 experts failed to produce scientifically convincing evidence 18 that Parlodel causes vascular constriction. Her experts 19 relied on various types of scientific data, published case 20 reports, medical treatises, human re- challenge data, even 21 animal studies, internal company documents, and the FDA's 22 revocation of parlodel's indication for suppressing 23 lactation to establish that parlodel acts as a vacular 24 constriction. We agree with the district court's conclusion 25 that this data does not demonstrate to an acceptable degree

1 of medical certainty that parlodel can cause intercerebral 2 hemorrhage, stroke. 3 The types of evidence, the data, that the 4 plaintiffs have here in this case is even less that the 5 Glastetter court had. At least they had animal studies. 6 They in fact had the revocation from the FDA as opposed to, 7 in this case, the endorsement of the product by the FDA, at least the endorsement of the continued use of the product. 8 9 So we'll rest on our papers with respect to the 10 Our view is that the general state of the knowledge 11 in the scientific and medical community is that the theory 12 espoused by the plaintiffs here is generally rejected; that 13 the experts' opinions are based upon flawed data; or in the 14 case of exploratory studies and CFD, items that don't tend 15 to prove causation and weren't intended to and the 16 methodology is flawed. Thank you, Your Honor. 17 THE COURT: Thank you, Mr. Blackwell. 18 JUDGE LEARY: What do the parties intend to do 19 with regard to any visual slides that they present today or 20 during these hearings? 21 MR. BLACKWELL: We had thought, Your Honors, to at 22 the end of each day look at the ones we actually used and 23 then to put those together for the Court on the following 24 We haven't discussed it with the plaintiffs yet, but 25 to make them available to the Court and of course the

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       opposing party then too.
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                 MS. CONLIN: We're fine with that. I mean, I did
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       bring a slide deck on my presentation, but perhaps it makes
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       sense to provide them to the Court at the close or tomorrow
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       morning.
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                 THE COURT: Then you've got the advantage of
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       knowing which ones were actually used.
                 MS. CONLIN: That's true.
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                 MR. BLACKWELL: Thank you, Your Honor.
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                 THE COURT: Thank you. We'll resume at 1:15.
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       We're in recess.
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                               (12:30 p.m.)
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                              (Lunch recess.)
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                                (1:18 p.m.)
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                              (IN OPEN COURT)
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                 THE COURT: Please be seated. Mr. Ciresi.
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                 MR. CIRESI: Yes, Your Honor. I was just waiting
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       for the judges to sit.
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                 THE COURT: Ms. Conlin.
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                 MS. CONLIN: Good afternoon, Your Honors. I'd
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       like to start with the Court's question about the FDA letter
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       this morning and the point that that FDA letter, and we
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       don't know what information the FDA had when it put that
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       letter out, but we do know that it says where intraoperative
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warming is warranted, in cases which intraoperative warming is warranted, and this is a document, an Arizant document, that came from 3M's file, dated June 23rd of 2007.

And it's regarding the Bear Paws product, and the Bear Paws product is a forced air warming device manufactured and sold by 3M that warms a patient up and blows hot air on them before surgery. So Bear Paws is typically used before surgery, Bair Hugger during surgery. And if you look at the advantages listed there for using the Bear Paws, warming up the patient before surgery, it says, Can be used when intraoperative warming is contra-indicated, and then in parentheses it says, Aortic cross clamp in orthopedic cases.

And that's what we're talking about here is orthopedic cases and the environment of use, and you heard a little bit from Mr. Ciresi, and you're going to hear more about it as we go through that the reason why orthopedic surgeries are contra-indicated for a Bair Hugger device is because it only takes one or two microbes, CFUs, to land on that implant to cause an infection, and it distinguishes it, and their experts do, too.

By the way there is no dispute between the experts. There is a difference between a surgical site infection and what's known as a deep joint infection or prosthetic joint infection, and that's because, as

Mr. Ciresi alluded to, you can have infections that are caused post surgery, on the top of the skin or in the tissue, from bad bandaging or, you know, being unclean or shower. You name it.

But that's the issue, and this document from 2007 says, Reduces the potential for nosocomial transmission of pathogens by eliminating the need for intraoperative warming. I'm quite certain that the FDA did not have that document.

The other that I just want to show you because it goes to this FDA letter and one of the questions this morning on particles versus bacteria, this a document from Michelle Hulse Stevens, and you heard 3M talk this morning about the Orthopedic International Consensus, and they put up slides from that.

And this is actually an internal memo from
Michelle Hulse Stevens, head of 3M Infectious Disease
Division. She's in charge of all this, reporting back on
what she heard at that meeting. She says, All, I sat in on
the group addressing the OR environment for this consensus
document. There is an amazing concern about any
particulates in the air during joint replacement surgery and
almost uniform comment that forced air warming increases
particulates in the air.

So then they go on in the last line, They equate

particulates with bacteria in the air and cite studies. Do not have the citations. She didn't have the citations that support this. That's some of the evidence that I'm going to talk with you about today.

Daubert, as this Court is aware, basically allows for the liberal admission of expert testimony. It only need be relevant and reliable, and I don't think as we go through this with respect to our three experts you're going to see much dispute about the reliability of the methodology that they employed in arriving at their conclusions.

And under the Frye standard under state law,
there's an additional prong which is, it has to be accepted
if it's novel, and this isn't a case in which the
methodologies that the scientists are employing are novel.

3M doesn't even dispute the methodology employed by our
experts. What they're disagreeing with is the conclusion.

I think Mr. Gordon made that pretty clear right before
lunch.

approach. Doubts are resolved. Excuse me. There's a typo there -- in favor of admissibility. Factual basis for the expert opinion goes to credibility not admissibility, and a District Court abuses its discretion if it results in doubt in favor of excluding expert testimony or decides the correctness of an expert's opinion.

I want to talk with you at the start a little bit about the way the briefing took place in this, and I am loathe to cast aspersions on colleagues, particularly those in Minnesota, but I do want to point out a couple of issues in connection with the briefs that were submitted.

One of the things that they say, and this is in, the top one is in their first brief on page 14, the very first point under their argument section. The McGovern study is the only epidemiological study cited by Samet, Jarvis and Stonnington in their report, and it goes on in their reply brief says, Here by contrast, McGovern is the only observational study that SJS rely upon for their opinions.

In other words, the story that has been told is that the experts in this case are relying on McGovern and McGovern alone, and that is simply not true. Let me show you. Dr. Samet, he is our epidemiology expert in this case. He is world renowned. When he was working for us in this case, he was at U.S.C. He is now a dean in Colorado at a public health facility, but he was also head of epidemiology for Johns Hopkins for a couple of decades.

He used the Bradford Hill criteria to evaluate causation in this case. Defendants don't dispute that he used the wrong methodology. They in fact endorsed Dr. Samet's methodology, and you'll hear when we get to

Dr. Borak, 3M's expert, he employed the same methodology, and there was a lot of talk this morning on, well, McGovern and these other things don't show causation, and causation is never shown in an observational study.

What an observational study shows is association, and that's what McGovern showed was an association between use of the Bair Hugger and deep joint infections. Causation is what an epidemiologist does when they look at all of the evidence that's been amassed in a case, and they make a scientific judgment as to causation, and that's what Dr. Samet did here.

Dr. Samet, contrary to the suggestion in 3M's brief that we are riding the McGovern train and the McGovern train alone, he considered multiple lines of evidence. If you look at his reference list in connection with his expert report, he looked at hundreds of medical articles. He looked at the deposition transcripts of a number of the key players, including all of the McGovern authors who were deposed.

There were a couple that refused to in England. I think Dr. Harper was one of them, but for everybody that was deposed, he looked at those. He looked at a number of internal 3M documents and Arizant documents. He looked at depositions of 3M employees. He looked at the medical literature, and he looked at the expert reports.

So to suggest that there's a single McGovern train that we're riding is just simply not borne out by what the experts actually did. Dr. Jarvis, you'll recall, Your Honor, Your Honor saw him at science day. He was head of the CDC Division of Infectious Diseases for 17 years.

Again, like Dr. Samet, 3M doesn't dispute his qualifications, and like Dr. Samet, he employed a multi disciplinary experience of investigating infectious outbreaks, just as he did at the CDC, and he cited dozens of sources, along with McGovern, and if you look at his report, you'll see, for example, on pages 9, 10, 11, 12, I mean the citations to the relevant evidence that he as a scientist relied upon in reaching his judgment of causation in this case is not limited to McGovern as suggested.

Now, defendants may disagree to its conclusions, but that's an issue for the jury, as we talked about this morning. Dr. Stonnington, he approached this case from a clinician's standpoint. He performs a high number of surgeries in the orthopedic area, the area of interest, and since he started looking into it, he stopped using the Bair Hugger altogether.

Again, looking at evidence from a clinician's standpoint, his investigation and assessment is something that is well accepted and allowed under Minnesota law and the *Daubert* standard.

Now, I want to talk with the Court a little bit about the mechanisms of causation, and this is actually a figure from Dr. Samet's report. It's Figure 3, and it's the mechanism by which Dr. Samet concluded that the Bair Hugger increases the risk for deep joint infections.

You have the Bair Hugger device, and as you know from science day and some of the other hearings, that's a device that typically sits on the floor. Air intake is at the bottom of the device below the sterile operating field. There's been a ton of evidence in this case that 3M knew their filtration system was inadequate. They led people to believe that it was hepa filtered, and in fact it wasn't until 2016 after this case was well along the way that they informed the FDA that in fact they did have a hepa filter, and it basically harbors bacteria and pathogens, and that is absolutely undisputed by 3M.

Underneath this, you've got two mechanisms by which Bair Hugger increases the risk. You've got on the bottom microbial contamination of the surgical field, and you heard Mr. Blackwell talking about, well, plaintiff should have done their own testing. They should have done agar plates and seen whether bacteria lands on an agar plate in higher numbers when the Bair Hugger is on.

We didn't need to do that study because the studies exist, and you can see them set forth in Jarvis's

report, as well as Samet's. You have the Tumia study, the Moretti study, the Zink study. All of those show that when the Bair Hugger is on, the agar plate near the surgical site show an increase in bacteria.

The Oguz case, the one from 2017 that

Mr. Blackwell, put up, showed that with respect to plate 4,

there were six plates in that study. Plate 4 was the only

plate that was at the surgical site, the hypothetical

surgical site. That was the plate that showed a substantial

increase in the bacteria on that plate, and that's, the

other plates were at different locations in the OR. That

plate, plate 4, you can read the study, shows that there was

an increase there.

Dr. Jarvis also talked about the Bernard study.

That was a case in which there was an outbreak of

Acinetobacter baumannii in the hospital, and they traced the infection back to both the Bair Hugger device. The dust in the Bair Hugger device carried that exact pathogen, as well as some dust in another piece of equipment in the OR.

The Wood study cites Moretti and says there is an increase, a substantial increase in bacteria on the agar plates when the Bair Hugger is in use.

MAGISTRATE JUDGE NOEL: Can you just direct me where in the memos do you recite all of these studies showing an increase in bacteria?

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                 MS. CONLIN: I think, and I can pull it up.
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       have Mr. Sacchet pull it up for me, but I think it starts on
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       page 41. It might be a few pages beyond that, but I will
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       pull it up and show you.
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                 MAGISTRATE JUDGE NOEL: This is the memo in
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       opposition to their motion to exclude Samet's?
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                 MS. CONLIN: It is, Your Honor. And then the
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       other place that you can look for it is, you can look at, as
 9
       an example, Dr. Jarvis's report where he talks about these
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       as well. You know, for example, the bottom of page 13 in
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       Dr. Jarvis's report says, The study did document an increase
12
       in mean bacterial load values when the Bair Hugger forced
13
       air warming was employed.
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                 So I don't have a nice table for you, but it is
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       interspersed throughout briefings and our expert reports.
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                 MAGISTRATE JUDGE NOEL: Okay. Thank you.
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                 MS. CONLIN: Page 46. I was off by five pages,
       Your Honor.
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                 MAGISTRATE JUDGE NOEL: Thank you.
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                 MS. CONLIN: Other independent studies have
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       further found that the Bair Hugger increases both particles
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       and bacteria at the surgical site, Moretti 2009, Samet
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       deposition citing Moretti, the Wood and Tumia. It goes on
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       from there, Your Honor.
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                 MAGISTRATE JUDGE NOEL: Okay. Thank you.
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MS. CONLIN: The top of the chain causation is disturb uni directional flow, and again not simply relying on McGovern for that proposition. You have McGovern, which did do a bubble buoyancy test, but you also have Legg,

Dasari, Belani, all showed a substantial disturbance of the uni directional know which is considered ideal for orthopedic surgeries, and of course you have Dr. Elgabishi's analysis, our expert who did his own CFD analysis. He ran his CFD analysis on a computer of which there's only ten.

There is a handful in the country. He used two million hours of CPU processing time to run his simulation.

I doubt any of that was in front of the FDA, and I'm going to talk about that a little more. Then you go on to the increased dose of infectious organisms, again not simply relying on McGovern, but there are two studies that have come out, Stocks and most recently the Darouiche study from 2017, and I'm going to talk about that.

But basically what that study showed was, if you take a cubic meter in an operating room, for every ten in a cubic meter, CFUs, increase in CFUs, the colony forming units, so ten particles in that cubic meter carrying bacteria doubles the risk for infection, and we relied on that study, which hasn't been talked about.

And then you get to increased risk, and that's where McGovern comes in, and it does because what Samet,

Dr. Samet used and Dr. Jarvis used McGovern for was to quantify the risk based on this mechanism of causation, and it's not just our expert's word for it. Mr. Ciresi put this up, but these are what the parties agreed to in this case through depositions or through their experts.

You only need one, as high as ten, but one will do it to cause an implant in a prosthetic joint. Airborne contamination is how it gets there. Bair Hugger harbors infectious pathogens. 3M's witnesses said absolutely we know it does, and it increases the particles over the sterile field. Their 30(b)(6) witness said absolutely it does.

Increased particles cause increased bacteria, their experts admitted to that, and increased bacteria causes an increased risk, and at the bottom here is a cite to the Darouiche 2017, and by the way, that was a randomized clinical trial, the gold standard that 3M got up today and talked about and said there isn't anything.

Darouiche is the gold standard under their definition, and what it showed and what it said was that for every ten more colony forming units per metered square increases or approximately doubles the probability of an implant infection, and it gets back to the point Mr. Ciresi was making this morning which is, they've never done any testing to ascertain whether the Bair Hugger is appropriate

for use in orthopedic surgeries.

They haven't done it. You know from the document I just put up that in back in 2007 they knew that it might be contra indicated for orthopedic surgeries, and they haven't done any studies, no studies whatsoever. They have Dr. Sessler, part of their medical advisory panel say, please do a study. They refuse. Do you know why they refused? Because Dr. Sessler thought the air coming out of the Bair Hugger was sterile. He testified to me in his deposition to that. He didn't realize that the air coming out was dirty. He didn't realize that it caused this basically turbulence and convective currents in the operating room.

So Dr. Elghobashi's analysis, which confirmed some of the smaller studies, but it used a high fidelity, large ed simulation to study the interaction of the Bair Hugger use in the OR and what it does with the air movement. When the Bair Hugger was off, the operating room carried on as intended and as designed. When the Bair Hugger was turned on, it showed large levels of turbulence intensity which matters because in orthopedic surgeries in particular, everything below the operating table is considered unsterile. In fact, you'll hear stories from physicians that if one of the aids in the OR in an orthopedic surgery drops their hands below the table, they're required to go

out and scrub in again.

So basically what Dr. Elghobashi did, and I'm just going to show you one slide from his rather lengthy report, but this is not heat, by the way. If you look at this top graph, I'll just represent to the Court, that's actually turbulence. So a zero is a non-turbulent environment, so 60 is highly turbulent, so don't think of it as heat, think of it as turbulence.

You can see with the Bair Hugger off, which is the top one, and he ran that I think for 80 seconds. The operating room is potentially -- or is operating as intended. You've got the air flow coming down, and you can see that it's pretty much in the non-turbulent area. Turn the Bair Hugger, on and this is for 37 seconds only, and you can see that in 37 seconds, you already have that degree of turbulence going on, so what it's doing is essentially pulling up all of the unsterile air from underneath that operating table and dumping it in the surgical site, and that's what his study showed.

Now, let me talk a little bit about third-party research, all right. This is just some of the third-party research. And Your Honor, you asked if we have a table, we really don't, but these are sort of some of the key ones that we see. Does the Bair Hugger increase particles at the surgical site? 3M's author says -- or 3M's 30(b)(6)

witness, Al Van Derg, testified, quote, Every single study indicates that the Bair Hugger increases the particle count over the sterile field. That's 3M.

Sesler, 2011, one of the 3M's paid consultants, 3M funded the study that he did, they also edited, I may add, before it went to publication, also found increased particles over the sterile field. And, in fact, when I deposed Dr. Sessler, he said that the order of magnitude of increased particles based on what he observed was 10 to 12 fold. That's what Dr. Sessler said on 3M's medical advisory.

Legg 2012 and '13, increased the particle concentration a thousandfold over the surgical site on particles -- moving from particles to bacteria. By the way, on particles, I think Your Honor asked the question this morning, can particles be a proxy for bacteria? The Stocks and Darouiche studies say absolutely, both of those are peer-reviewed studies, that they absolutely act as a proxy. But Dr. Wenzel, 3M's infectious diesase expert in this case, testified under oath that he believed that bacteria is carried on nearly 40 percent of particles. That's what 3M says.

Does it increase bacteria? I talked about this before, but Moretti shows mean bacterial loads were significantly increased from Bair Hugger use. Wood cited

1 Moretti and said yep, it's an increased bacterial load. 2 Tumia in 2002, higher bacteria at the surgical site as a 3 result of the Bair Hugger. And I talked about Darouiche so 4 I'm not going to go back to that again, but that's basically 5 how the chain of evidence goes. 6 MAGISTRATE JUDGE NOEL: Let me just ask this 7 question because I'm somewhat confused. 8 MS. CONLIN: Sure. 9 MAGISTRATE JUDGE NOEL: So obviously the 10 defendants base their whole attack on McGovern on various 11 citations to the depositions of these three experts, Samet, 12 Jarvis and Stonnington. 13 MS. CONLIN: Stonnington, yes, Your Honor. 14 MAGISTRATE JUDGE NOEL: And they cite places where 15 each one says that their opinion does depend or does rely on 16 McGovern. If what you're saying about Darouiche and Moretti 17 and Tumia are true, why didn't they say no? 18 MS. CONLIN: Well, what they said, and if you look 19 at the testimony very carefully, and this is sort of the 20 slight of hand that has been going on in this briefing, what 21 they each said, and it's an absolutely truthful statement, 22 is that the odds risk ratio, the percentage or the quantification of that amount of increased risk is based on 23 McGovern because it's an apples-to-apples comparison because 24 25 it's, you know, conductive warming to forced air warming.

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They used it, and if you go back and look at their depositions, they say I used that to calculate the odds risk ratio to quantify the risk. But, yes, you could definitely say that even if McGovern didn't exist, the Darouiche 2017 study would show that if you can prove that there's more particles over the surgical site in use, for every ten it doubles the risk, but our experts did rely on McGovern for quantifying that odds risk ratio.

You know, we heard this -- we saw slides that had causation X'd out and X'd. Epidemiological studies don't show causation. They show association. This is from the same reference manual that Mr. Blackwell cited to this morning, an association is not equivalent to causation. Causation is a judgment for epidemiologists to make based on the totality of the scientific evidence. And that's why you see in McGovern, they say we say there's an association because they're looking at one group of patients and they're saying we see an association. It's for the epidemiologist to come in, look at all of the evidence, look at all of the literature outside of that, and make a causal determination. That's what was done here. And in fact, their experts agree, deciding whether associations are causal typically is not a matter of statistics alone but also rests in scientific judgment. And the Hill criteria that our experts relied upon is well-known, not novel, and is used in a

number of cases.

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Now, they talked about the Viagra case, and they said, well that's one of those cases where they came back in and they realized that there were problems and they told the litigants that they couldn't rely on it. Very different situation with respect to the study underlying that. That was a case in which there was an allegation that Viagra causes NAION or vision loss and they had a study. What they found out was that some of the participants had vision loss before they ever took Viagra. That's not the issue here. In fact, both 3M's experts, Dr. Borak and Mr. Holford, said that temporality is met in this case.

And I mentioned this before, but the cases are replete where opposing experts often interpret the same different studies differently. That's why you have a trial. That's why you have subject to cross-examination. The jury is, at the end of the day, is to make those final determinations.

The McGovern study. Most of the morning was spent on the McGovern study. I'd like to spend a few minutes on it. It was peer reviewed, showed a strong association between Bair Hugger and DJI. This evidence from McGovern shows that it basically increased the risk of an infection if you use the Bair Hugger 3.8 times, tripling the risk. And there was 1437 patients, a fairly robust study.

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                 And what's curious about this before I go onto the
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       details of McGovern is that of all of the studies that 3M
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       put up this morning and said that we're presenting some sort
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       of theory that doesn't pass muster under their view of the
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       world, there isn't a single epidemiologic study that
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       contradicts or disproves the association between Bair Hugger
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       and deep joint infections. 3M doesn't have any evidence.
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       So McGovern alone dictates that this goes to the jury.
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       Talked about that a little bit.
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                 I want to talk to you a little bit about the
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       McGovern authors. These are the people that 3M is accusing
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       of academic fraud. I think it was -- the word "fraudulent"
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       was used. The word, you know, "lying" was used. The
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       word --
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                 THE COURT: Setting aside the words, the graphs
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       that were shown to us just before lunch, do you have any --
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       is there any evidence that those don't say what they were
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       shown to say?
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                 MS. CONLIN: Yes.
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                 THE COURT: And the Figure 7, the history of
21
       Figure 7.
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                 MS. CONLIN: Yes.
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                 THE COURT: Can you tell us what, if anything, is
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       inaccurate in the defendants' presentation about the
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       previous iterations and the Figure 7?
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                 MS. CONLIN: Yes, absolutely. Let me go to that
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       and then I'll back up.
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                 One of their attacks is these tabulation error
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       that maybe there was one more in each thing or in each
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       period. Basically, if you look at Figure 7, because one of
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       them was, oh, they took --
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                 THE COURT: They took the 15th, yeah.
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                 MS. CONLIN: So if you look at, I'll tell you what
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       we think happened. We think that it was a miscoding of the
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       year because if you look at Figure 7 in the McGovern report
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       and you compare it to the draft that was put up, there's,
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       let me just show you, between those two, there's one more
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       dot over here which suggests that what it was the year was
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       miscoded which is why it ended up where it is, but that's
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       where the new dot came up in the final dataset.
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                 THE COURT: That's not the Figure 7 from the final
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       report though.
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                 MS. CONLIN: Yeah, this is Figure 7 from McGovern,
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       Your Honor. You may have been looking --
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                 THE COURT: So you're pointing up to the dots up
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       above the --
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                 MS. CONLIN: Yeah. So they made much ado about,
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       you know, this graph as if t was --
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                 THE COURT: How can you tell that one of these
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       dots is associated with that?
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1 MS. CONLIN: You have to look very carefully 2 between the dots on the draft McGovern manuscript that 3 Mr. Gordon put up and this one and that's where it appears. 4 THE COURT: Do you want to do a side by side? 5 you have those? That's what you need, you need to take the 6 previous one and then you can find up there, there's going to be one more little dot there? 7 MS. CONLIN: Yeah. And in fact, Your Honor, this 8 9 is Mr. Sacchet is going to get into this in great deal in 10 connection with his motion on Doctors Borak and Mr. Holford, 11 but he's going to walk you though that. 12 Now, here's where it lands at the end of the day. 13 Dr. Samet said one more, one less in each group doesn't move 14 the needle in terms of the overall conclusions of McGovern, 15 the author said that, and in fact, 3M's experts said that as 16 well. Professor Holford said one more, one less, it doesn't 17 matter. 18 The other issue that they say is that they 19 fabricated the start date. Again, pretty serious 20 allegations to be --21 THE COURT: No, they compared the differences in 22 the statistical outcomes with one start date versus another. 23 MS. CONLIN: Yeah, but they -- Mr. Gordon said 24 this morning it's fabricated. THE COURT: Right, well, just compare the Figure 7 25

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       that has the infection data to the draft. Yeah, the draft
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       has the number with the peak in 2010 and then the final has
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       this flat line infection rate percentage.
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                 MS. CONLIN: Well, it's basically just taking an
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       average, but if you look --
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                 THE COURT: It doesn't say average. It says
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       infection rate percentage, and it purports to show it over
       time, July '08, January '09, July '09, and it doesn't --
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 9
                 MS. CONLIN: It's in the box right above it, Your
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       Honor. It says "raw case data." That's where the dots come
11
       from, so they're showing exactly when the infections
12
       occurred along this timeline, and underneath it, it says
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       average infection rate during period percentage.
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                 THE COURT: But the dots are above any -- you've
15
       got no way to quantify those.
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                 MS. CONLIN: Well, it's quantified as a matter of
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       statistics. What they did here --
                 THE COURT: It's not a matter of statistics. It's
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19
       an average. It just shows -- what the defendants are saying
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       is you get a different average if you take different
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       numbers. I mean, that's not -- nothing remarkable about
22
       that. If you -- you're going to get a different average if
23
       you start in July of '08 versus if you start in September of
24
       '08.
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                 MS. CONLIN: Yes. And what I'm saying is and
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that's where I was going which is Dr. Reed testified under oath in this case that the reason that they started the data on July 1st of 2008 was that was the first time that they had full-time surveillance for infections amongst these three hospitals. In other words, before that time, there was some ad hocness to it, some were reporting, some weren't. And he testified, and it is unrebutted, that he started -- they started that date because of the fact that was the first time they had full-time surveillance available for the ones at hospital. And, you know, Mr. Sacchet is going to put up the testimony on it, but that's what they said.

So, I mean, you look at these three authors, you've got Dr. McGovern basically standing behind the study. You have Dr. Reed standing behind the study. And Dr. Read, in fact, did further investigation and published on his own a couple of studies post-McGovern on the two confounders, one on the prophylactic antibiotics as well as the antithrombo regimen, and said I can conclusively rule out those two as confounders in that study.

You have Dr. Belani who is here in Minnesota at the University of Minnesota, you know, head of anesthesiology, he says, I've looked at this, I stand behind this work.

1 You have Dr. Nachtsheim at the Carlson School of 2 Management here in Minnesota, he's looked at all of the 3 data, I stand behind the conclusions in the McGovern paper. 4 And you have Mark Albrecht, we gave you a better 5 photo of him, who, by the way, we haven't had the chance and 6 haven't questioned in this case because he was subpoenaed by 7 3M. He spent seven hours under questioning by 3M and he got up and left when the seven hours were up, and so he is 8 9 somebody that we anticipate subpoenaing for trial, but we 10 haven't had a chance. But one of the things that he says, 11 because they talked about this tabulation error look, and 12 they're like, look, there's a problem here. He said -- 3M 13 says I don't know if that's the final data or not, and he 14 says I don't either. I mean this is a guy who was working 15 his way through school. And by the way, that consulting 16 agreement they put up postdates McGovern so you can set that 17 That consulting agreement that Mr. Blackwell waved 18 around with great fanfare was signed after the McGovern 19 study. But this is --20 THE COURT: Well, the McGovern study is the one 21 that says that authors of this have a financial interest in 22 the outcome. 23 MS. CONLIN: Yeah, yeah, yeah. Well, and they 24 said that, judge, because Albrecht was working part-time at 25 Augustine when he was getting his MBA from Minnesota. He's

1 one of the students of Dr. Nachtsheim. 2 THE COURT: Is there anything in the record to 3 indicate that's the reason that that disclaimer was put on 4 there? 5 MS. CONLIN: That -- none of these other authors 6 have any connection to Augustine so, I mean --7 THE COURT: The record contains the disclaimer. Does the record contain an explanation of the disclaimer? 8 9 MS. CONLIN: No, not to my knowledge. And if I'm 10 wrong, I think Mr. Sacchet can correct it, but all the 11 authors were not paid by Augustine. Dr. McGovern testified 12 that in connection with running the study, he actually ended 13 up losing money on it. There isn't anybody who's ever 14 worked at Augustine or had any connection to him outside of 15 this litigation -- or out of this McGovern study. 16 So we talked a little bit about this, but the bulk of statistical studies seen in court are observational. 17 18 That's straight out of the reference manual. And Mr. Ciresi 19 touched on this, this morning, but 3M's refused to do the 20 randomized controlled trial. So tabulation error doesn't move the needle, and 21 22 I'm going let Mr. Sacchet delve into the details on that. 23 Hypothetical confounders, Dr. Read and others have 24 testified they weren't confounding. And, in fact, what's 25 interesting about this argument is 3M has no scientific

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evidence to suggest that these are confounders. It is pure speculation on their part, and the studies that do exist suggest that none of the changes in the antibiotic regimen or the antithrombo protocol map, and you have to have some sort of meaningful relation before you can argue it's a confounder and when the study authors are saying I've done more work and in fact they're not confounders post-publication, they don't have anything to go on. And in fact, their experts admitted that in the depositions, and you'll see some of those admissions when Mr. Sacchet gets up. And at best, the challenges go to the weight of Dr. Samet, I would say as well as Dr. Stonnington, Dr. Jarvis, the weight of testimony on McGovern, not its admissibility. Now, I want to, unless the Court has other questions on McGovern, I want to end on a couple of points since they came up in connection with some of the briefing. THE COURT: Just before you leave McGovern, what do the study authors say, if anything, with respect to the statement, "Unfortunately, recordkeeping was incomplete for the additional factors of blood transfusion, obesity, incontinence, and fitness for surgery"? MS. CONLIN: They said they don't think it moves the needle, and that's what Dr. Samet said as well. And if you look above it --THE COURT: But did they say why they wouldn't

1 think that would move the needle? 2 MS. CONLIN: Well, because you've got 1437 3 patients so you've got a fairly high group. The surgeries 4 were, you know, conducted over relatively short timeframe, 5 and it says demographics revealed no significant difference 6 between the two types of warming for SSI risk factors of 7 age, type of surgery, diabetes, and the late pre-operative 8 state. 9 THE COURT: If it doesn't matter, why would they 10 go on to say unfortunately? 11 MS. CONLIN: Well, I think they were being 12 cautious like a good researcher does which is why they said 13 hey, we've also got these potential confounders and the 14 change in antibiotic regimen and the anti-thrombo regimen, 15 so they disclosed it all. They put it out there and said we 16 want everybody who's reading this to know about those 17 particular confounders. But in point in fact, whether 18 you're diabetic, whether you're obese, you don't just get an 19 infection because of that. You have to have bacteria 20 landing on the implant before you will ever have an 21 infection. 22 THE COURT: Well, can't you have bacteria in there 23 already? Didn't one of your experts say that at some point 24 from the CDC? 25 MS. CONLIN: No, you're putting an implant in so

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            I mean, the cause of PGI's are things being introduced
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       during the operation onto that implant. So finally --
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                 MAGISTRATE JUDGE NOEL: One last question on that.
                 MS. CONLIN: Sure.
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                 MAGISTRATE JUDGE NOEL: Because it's been bugging
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       me all morning, and maybe this isn't the right time or
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       you're not the right person, but is every plaintiff suffer
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       -- does every plaintiff in the MDL suffer from a deep joint
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       infection as opposed to some other surgical site infection?
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                 MS. CONLIN: Yes, Your Honor.
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                 MAGISTRATE JUDGE NOEL: Okay. Thank you.
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                 MS. CONLIN: And so the reason why it's created
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       during surgery is because the wound is closed up. It's
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       stitched up. There isn't bacteria entering once that's
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       stitched up. Now, you might get an infection on the top
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       surface or whatever, but if you have a deep joint infection,
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       something landed on that implant during the surgery, and you
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       don't just have bacteria on an implant because you're obese
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       or diabetic; it has to land there. Now, it might increase
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       your risk of getting an infection, but without -- and
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       Dr. Jarvis is very clear about that, without bacteria being
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       introduced during surgery, you're not going to have an
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       infection.
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                 THE COURT: Was Jarvis the one who was at the CDC?
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                 MS. CONLIN: Yes.
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1 THE COURT: So when he was at the CDC, though, 2 didn't he say that deep joint infections come from bacteria 3 that's already in the patient? 4 MS. CONLIN: No, he said surgical site infections 5 can come from. He wasn't talking about deep joint 6 infections. And that's been a -- again, a slight of hand 7 and a conflation on that. And if I'm wrong, I'm sure Mr. Sacchet, but that's my recollection of it so --8 9 JUDGE LEARY: Let me ask this, you know, one of 10 the overriding concerns I have has to do with obviously 11 Rule 702, Daubert, and Frye-Mack, and the issues we have to 12 consider as judges and I have to consider with regard to 13 Frye-Mack is basically whether or not there is scientific 14 reliability to the theories offered by the plaintiff and 15 whether or not they're generally accepted within the 16 relevant scientific community. And I think many of us are 17 familiar with the expression that a collection of facts does 18 not add up to science. And that's the thing that I struggle 19 with most in hearing any argument presented with regard to 20 what is the alleged science in this case. We do have the 21 FDA letter. We do have the ECRI Institute. We've got the 22 consensus, the strong consensus of that international body, 23 and I haven't heard anything from the plaintiffs' side that 24 serves to undercut the conclusions that they have come 25 apparently looking at the same evidence. I'm not hearing

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       anything -- I'm not hearing the plaintiffs suggest that
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       those organizations have any less access to the same
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       information that the plaintiffs' experts are looking at.
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                 MS. CONLIN: We don't know what the FDA reviewed,
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       and 3M has refused to tell us know what the FDA reviewed,
 6
       but let me address --
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                 JUDGE LEARY: Let's talk about the ECRI.
                 MS. CONLIN: Yeah, ECRI --
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 9
                 THE COURT: And the international group, they went
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       through and explained a lot of what they looked at.
                 MS. CONLIN: And Michelle Hulse Stevens came back
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       to 3M and said this is an issue, we've got --
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                 THE COURT: That's one person's statement about
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       what they heard as opposed to an actual report. There's a
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       difference in terms of the hearsay admissibility.
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                 MS. CONLIN: Well, she's head, but let me address
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       the ECRI first. And we set this out in our reply brief.
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       The ECRI Institute wanted to do their own study, and the
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       documents, you can see in our reply brief, 3M shut them
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             They said the last thing we want is ECRI doing it.
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       They sent them stuff which they hold in their documents one
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       sided yet competitive, and then they were allowed to edit
23
       the ECRI document before it was published. So --
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                 JUDGE LEARY: Well, here's -- when you -- and with
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       all due respect, when you make comments like that, that
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       really strikes me as lawyer argument, the very thing that
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       Glastetter warns against, and it does not in any way
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       undercut what ECRI chose to do. There's no one in this room
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       that disputes the attempt at objectivity of the ECRI
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       Institute regardless of. Whether or not the information
 6
       you're suggesting is accurate, there's no reason to suggest
 7
       that it in any way altered the recommendation of the ECRI
       Institute.
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 9
                 MS. CONLIN: Well, ECRI this year did an ECRI
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       update, you're getting warm, uncovering forced-air warming
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       units, same organization. They said a warming unit should
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       have a HEPA grade or better filters to reduce the risk that
13
       airborne dust, bacteria, and mold will be blowing onto the
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       patient or into wounds. That's --
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                 THE COURT: What exhibit is that?
16
                 MS. CONLIN: I'll pull it out, Your Honor. I'm
17
       going to have somebody pull it out.
18
                 THE COURT: Okay. But doesn't it say on the top
       what ECF document it is?
19
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                 MS. CONLIN: I don't have it here. If I might
21
       approach, I can hand it up.
22
                 THE COURT: Well, I can pull it up myself if you
23
       tell me what the docket number is.
24
                 MR. BLACKWELL: May we see that, Your Honor? We
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       don't think that's in the record.
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                 MS. CONLIN: It's Plaintiff's Exhibit 64.
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                 THE COURT: To what?
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                 MR. BLACKWELL: To what?
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                 MS. CONLIN: To our opposition to the motion to
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       exclude --
 6
                 THE COURT: Which is docket number what?
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                 MS. CONLIN: It's a motion to exclude Samet,
 8
       Borak, and Stonnington.
 9
                 THE COURT: I'm looking at the numbers. I need a
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       number, docket number.
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                 MS. CONLIN: I'll pull it up, Your Honor. While
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       they're pulling that up, I'll address Your Honor's direct
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       question. It's not just -- the studies are consistent.
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       This isn't a novel theory. The studies are consistent.
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       use the Bair Hugger, you're going to have more particles and
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       bacteria over the surgical site. The McGovern --
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                 JUDGE LEARY: When you say that, you seem to be
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       neglecting a number of studies from reputable organizations,
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       including the FDA and the ECRI Institute.
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                 MS. CONLIN: Well, they haven't -- with all due
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       respect, I don't know what the FDA looked at. I mean, I
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       don't, and I think that would be fair game, but the ECRI
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       Institute doesn't have the admissions of 3M that, yes, their
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       studies and every single study they've seen shows an
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       increase in particles when the Bair Hugger is in use.
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1 That's not an uncontested fact. 2 JUDGE LEARY: So, you know, I'm just trying to 3 make a point from -- a point of view of a judge deciding 4 whether or not the information being presented is 5 scientifically reliable and whether or not it's generally 6 accepted. We have to take a look at what is out there, and 7 as Glastetter says, there may be a forcible argument that 8 can be made that somewhere down the road general causation 9 can be established, but we're not here today, and that's 10 what is of concern to me. I don't ultimately care who's 11 right or wrong in terms of who wins or loses on this issues. 12 I'm just concerned about our obligation to accurately 13 understand the reliable science as opposed to lawyer 14 argument. And when you look at the science, I see a lot of 15 argument, but I don't see anything that undercuts FDA, ECRI, 16 or the opinions of the international conference. 17 MS. CONLIN: Well, I mean, McGovern does give you 18 the odds risk ratio, but you do have Darouiche and Stocks 19 and all the other studies that we showed and that's how 20 epidemiology works which is you take, in our case --21 JUDGE LEARY: But doesn't the FDA understand that? 22 MS. CONLIN: No, they --23

JUDGE LEARY: Doesn't the ECRI substitute understand that? Don't all of the attendees and voters at the international conference, don't they understand that?

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                 MS. CONLIN: Well, you know, on ECRI, you know --
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       and by the way, Your Honor, the docket number is 910-53,
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       Exhibit 64. ECRI says you should have a HEPA filter which
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       we know 3M does.
                 THE COURT: The docket number is 879 actually.
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                 MAGISTRATE JUDGE NOEL: No, no, no, she's -- PX-64
       refers to an exhibit of a declaration or --
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                 MS. CONLIN: Yes, it's an exhibit to a
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       declaration.
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                 MAGISTRATE JUDGE NOEL: And the docket number you
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       gave was?
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                 MS. CONLIN: 910-53. And, Your Honor, it's on the
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       last page of that document, the last paragraph.
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                 THE COURT: All right. Thank you.
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                 MS. CONLIN: The last sentence.
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                 While the Court is pulling that up, the FDA only
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       has available to it what manufacturers give it. It doesn't
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       have, like the CDC or some organizations, an ability to go
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       out and conduct their own research. They rely on what is
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       given them, which is why the Bair Hugger was first approved
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       based on a 1937 cast dryer because they have to rely on what
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       the manufacturers are saying to them which is why the FDA
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       going one way or another, the courts have been very
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       consistent on that, doesn't impact whether a matter is ripe
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       for the jury or not.
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MAGISTRATE JUDGE NOEL: I'm sorry, Ms. Conlin, was it 910-53, Exhibit 64? MS. CONLIN: And while they're pulling that up, Judge Leary, there is a difference between methodology and conclusion. The methodology that our experts employ in this case is not novel, is well grounded in science. What the issue is the conclusions. And the conclusions, as long as the methodology is sound and reliable, the conclusions that you draw from that are for the jury, and I think the cases both under Frye-Mack as well as the Daubert standard support that. Do you have it, Your Honor? Okay. It was cited in our papers. Lastly, I just want to conclude with a couple of the sort of slight of hand issues that I just want to point

Lastly, I just want to conclude with a couple of the sort of slight of hand issues that I just want to point out for the Court. The top of this is on the tabulation error, and 3M writes SJS do not dispute that when the tabulations errors are corrected, the association between the Bair Hugger system and infections disappears. That's not true. In fact, Professor Holford testified that if you correct the tabulations errors, your still over 2.0, and that, in fact, is borne out in the testimony that we have cited this.

 $$\operatorname{\textsc{MAGISTRATE}}$$ JUDGE NOEL: That was the question I had this morning for Mr. Blackwell and he gave me a

1 different answer. So explain to me again the difference 2 between -- he thought that the 2.76 number was simply 3 accounting for, even assuming the correctness of the 4 McGovern data, and you're telling us -- and then he said 5 then that all of your witnesses agreed that if you accept 6 their corrections to the McGovern data, that it does go to 7 zero. 8 MS. CONLIN: No, we don't agree with that. 9 MAGISTRATE JUDGE NOEL: Work those numbers through 10 Who says what? for me. 11 MS. CONLIN: Sure. Okay. So this is, at the 12 bottom of this page is a footnote out of Professor Holford's 13 report, and this addresses -- well, is there one more --14 it's at the very bottom it's small because it's a footnote 15 from Professor Holford's report from 3M, and basically he 16 said, well, if there's one more infection in each group I'm 17 going to calculate that out, and he still has a odds risk ratio of 2.86. 18 19 Professor Holford also testified that even if you 20 accept the confounding evidence, it's still got more than a 21 doubling of the risk on that, and Mr. Sacchet is going to 22 get into that in great detail in connection with the next 23 presentation. 24 MAGISTRATE JUDGE NOEL: Okay. 25 MS. CONLIN: The other thing, just to point out,

they say that we dismiss <code>Glastetter</code> as unsigned per curiam opinion with no legal effect. With all due respect, we didn't say that. If you look at what we actually wrote in our brief which is at the bottom of the slide, we said, Citing only <code>Glastetter</code> and science per curiam opinion, defendants insist that, blah, blah, blah. And we said, The defendants not only misstate the legal standard for medical testimony or Daubert, they misread <code>Glastetter</code>. We never said it had no legal effect. In fact, we spent the next two pages in our brief explaining <code>Glastetter</code> and what we think. We said that 3M misread it. We didn't say it had no effect under the law.

They also go in their brief, and this is in their reply brief, they say, We also argue there's a land slide of cases contrary to *Glastetter*. Well, if you look at your actual brief, and these are two chunks from page 13 and 14, we're talking about McLean's conclusive study. And they do that throughout there where we are accused of things we never said or there's a statement that says we admit it and there's no citation to anything.

And, finally, in their reply brief, they go
through and say over and over again, and this one
particularly sat in my coffer, reasons that are -- should be
obvious to this Court, but they keep saying that the
analysis of Professor Holford and Dr. Borak were unrebutted.

Well, we contest those opinions, and you're going to hear from it in connection with Mr. Sacchet's presentation.

The reason why we don't have rebuttal reports is because the Court told us we couldn't file them, and so I do think it's a bit disingenuous to come and say that their expert opinions are unrebutted because we didn't as a procedural vehicle have an opportunity to file a rebuttal, but we do dispute what Dr. Borak and Professor Holford concluded.

And when you see the admissions that they made in their depositions about the variation that Mr. Gordon raised, there will be no doubt in your mind that this attack on McGovern is not based in fact and it's not based in science and every single one of those authors who are esteemed in their field.

I mean it's interesting because I was at Dr. Belani's deposition and I actually had documents where 3M was so mad when that came up that they thought they were going to go and attack Mr. Belani, and I showed him those in the deposition and he was absolutely mortified. He didn't know that there was an internal plan to try to discredit him or his work and he was highly offended by it. But this has been an unbelievable and unfair, because it's not borne out, attack on the McGovern's authors. It is peer reviewed, published in a key journal, a journal which Mr. Blackwell

cited peer-reviewed study after peer-reviewed study, none on point, by the way, they weren't looking at prosthetic joint infections or the Bair Hugger, but saying that's the gold standard, said that randomized clinical trials are the gold standard. Well, Darouiche shows that if you increase the particles over the surgical site, if you get 10 CFUs, you're going to double a patient's risk of infection, and 3M has known that, 3M has refused to do the studies, and 3M has continuously said Bair Hugger for everybody, use it in every surgery when back in 2007 they already knew it was contraindicated in orthopedic surgeries because of the very small number of bugs it needs to cause a devastating infection in the patients.

And I'm done unless Your Honors have other questions.

THE COURT: Thank you.

MR. BLACKWELL: Your Honors, may I respond?

I particularly want to pick up where counsel left off about things been stuck in her craw. I've got a craw too, Your Honor, and there's some things sticking in it that I'd like to get clarified right upfront. First of all, you heard us spend a great deal of time putting up here study after study on biological plausibility, number 17 that Your Honors saw. Oh, I got to fix this. Study after study, and it was clear that to the extent they are biological

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plausibility studies, they don't support plaintiffs' theory. And counsel just stood here and cited Moretti, cited Wood, Tumia, Darouiche for the proposition that when the Bair Hugger is turned on that bacteria is increasing. And these studies do not say that. And in fact, the Darouiche study isn't even a study of the Bair Hugger, to be clear about it. And so that's the first thing sticking in the craw. If Your Honors look at the language, and I would suggest that the Court look very carefully at the language, because in a hearing that's supposed to be about the accuracy and reliability of facts and the data are not being confounded by lawyer argument that complicates the thing. And if you look at the actual language, if you took one of these for example, the Zink study, and what the authors actually found, and I quote, in Zink, in conclusion, conclusion, the warming therapy, when properly applied, to direct the flow of air away from the surgical site does not increase the risk of wound contamination in the operating That's what Zink says. If I look at what -room. MAGISTRATE JUDGE NOEL: What's Moretti say? MR. BLACKWELL: Moretti says, the Bair Hugger does not seem to pose increased risk of nosocomial infections, while it does offer the advantage of the potentially grave consequence produce by hypothermia during major orthopedic surgical procedures. The increased bacterial load found

after application of the body warming system appears to be comparable to or lower than the load present at the time of placement of the patient on the operating table.

So using the Bair Hugger, turning it on, either leaves a bacteria load exactly where it was or lower.

That's what the study in fact says.

And I can't even stop there because this whole

ECRI study was brought up which is simply astounding. First

of all, to spend all their time talking about a filter.

They don't have a filter expert, so this is nothing but

purely lawyer argument. But if Your Honors in fact looked

at the language, that you couldn't have missed it because

it's right above the language they're referring to, where it

says, and I quote, they -- I'm quoting the wrong thing, Your

Honor. Let me back up.

THE COURT: But you feel really strongly about it, whatever it is.

MR. BLACKWELL: It says, "There is an increasing scrutiny of forced-air warming units and a possible link to infection as a result of airborne contamination. While studies have shown no proof of this, there is still a concern that the blanket can increase a bacterial contamination to the surgical site, but studies have shown no proof of this. Why in the world do you bring up an ECRI study for the proposition that somehow some proof when it

1 expressly studies have shown no proof? ECRI simply iterated 2 what it had said before. And to bring this up in the 3 context was not being candid with the Court, with all due 4 respect. 5 MAGISTRATE JUDGE NOEL: What about the 2007 3M 6 chart they showed of when Bair Hugger versus Bair Paws and 7 the benefits of the Bair Paw is that it's not going to cause an infection? 8 9 MR. BLACKWELL: The Bair Paws is not the Bair 10 Hugger. MAGISTRATE JUDGE NOEL: I understand that. 11 12 MR. BLACKWELL: It's a separate and completely 13 different product, and --14 MAGISTRATE JUDGE NOEL: The point is that what 15 they were showing us in the exhibit, as I understand it, is 16 in attempting to sell the Bair Paws, one of the benefits was 17 that, unlike the Bair Hugger, it's not going to get 18 contamination into the site of an orthopedic surgery or 19 cardiac because it's just being used pre surgery and that's 20 one the reasons you should by a Bair Paw is --21 MR. BLACKWELL: I can't speak to the Bair Paws 22 document expressly. I can't. One of my colleagues will. 23 First of all, the mere fact that a scientist says something 24 doesn't even make it scientific. The fact that a fact 25 witness or marketing person says it doesn't make it

scientific. It's not a proxy for science and studies. And so if you look at the science, there simply is no there there. It is literally Potemkin science. And the only way they get at this idea and get anybody behind it is because their lawyers and experts were paid, propping up the village.

And if Your Honors were to drill down on what we have here at bottom, the only way that the plaintiffs can take the science that exists and have it support their theory is to recast the science by lawyer argument or using blue pencils. Confounders aren't really confounders in the studies. A study that says that there is no causal basis for positive association suddenly becomes a study that says that the Bair Hugger is a causal basis for the association. And then they cite studies like Darouiche that aren't even studies of the Bair Hugger. That alone should cast a great deal of skepticism on the plaintiffs' science —

MAGISTRATE JUDGE NOEL: They're not offering it for that. As I understand Darouiche, the point they make is that Darouiche stands for the proposition that if you increase particle over a surgical site, you're going to double the risk that bacteria is going to fall into and cause a surgical infection, whether it's Bair Hugger or anywhere else. What they're citing it for is the proposition that particles are a proxy for bacteria because

if you increase the particles, you're going to increase the risk of bacteria, isn't that what they're telling me?

MR. BLACKWELL: Well, Your Honor, what -- I want to be clear what they're not telling Your Honors s if Your Honors look at the nine studies that span a 25-year period on the screen right now that are looking here at particles emitted from the Bair Hugger, not some abstract, generic sort of thing unrelated in any respect whatsoever to what we specifically know about particles emitted from the Bair Hugger, which is if all particles, no matter what degree, carry bacteria, then why in the world can't they show Your Honors one study involving the Bair Hugger where that's true? There's only ipse dixit and generalities that have nothing to do with defacing the body of science that are specific to this product and this company and this case which is what this really is about.

And so these generic kind of claims, epi studies, and as we know, they don't conclude causation, there's the confounders, in McGovern, it says so, so we believe it.

Particles carry bacteria. It's as if we don't know. Study after study study the particles from the Bair Hugger and not a single one of them has ever found bacteria. So before they can meet their burden and get across you talk about issues with the methodology, I guarantee you not a single expert that the plaintiff has uses Bradford Hill for the

purpose of determining whether there is causation out in the real world, and I guarantee they certainly don't use it for purpose of deciding whether there is a positive association even in the first place, and the law says they can't do it here either.

MAGISTRATE JUDGE NOEL: So let me go back to the question I asked you this morning and I got a different question from Ms. Conlin which is explain to me this confounder thing. I understand your answer was their experts agree that if you account for the confounders that you identify or that they identify in McGovern, the association disappears, goes to zero. And Ms. Conlin says, no, her witnesses don't say that, they say it goes to two times instead of almost four times.

MR. BLACKWELL: Well, what can't really be argued with, Your Honor, and you'll see this with Dr. Holford, is that when you look at the period of time when the HotDog and the Bair Hugger are being subjected to absolutely the same residents, you'll see there is no difference in the surgical site infection rate. And so that's not expert argument. That's simply what the data shows and they are being both subjected to the same anticlotting regimen and the same antibiotic and regimen which they can't be argued with.

But irrespective of it, obviously even though I say this doesn't come down to McGovern, it comes to

McGovern, given how much time we've spent talking about
McGovern, rightly so. Apart from this issue, and I don't
need to be completely parted from Your Honor's question,
it's fraught with many other problems and issues and the
comorbidities, the obesity, the fitness for surgery, those
areas were not addressed at all by their experts in any way,
shape, or form.

MAGISTRATE JUDGE NOEL: Right. Well, except as I understand what Ms. Conlin tells me is that their experts do address them by saying that those factors might increase the observational risk of a surgical site infection or a deep joint infection but without bacteria getting into the site, those things do not cause a surgical site or deep joint infection.

MR. BLACKWELL: With all due respect to the argument counsel made, the fact is that the study authors found that those items have quite an impact on the potential development of infections that they weren't controlled for. It wasn't a randomized study. The peer review was considered that.

And if I may, Your Honor, we most certainly highly contest an ocean that somehow the body is sterile but for the implant that goes into it which introduces a bacteria.

We're going to show and the science is going to show, does show, that the most common source of surgical site

1 infections, prosthetic joint infections, is their own 2 bodies, the sweat glands, the oil ducts. When you cut into 3 it, it's necessarily contaminated. When it becomes an 4 infection depends on the body immune systems, and that's 5 where all of these other factors come in, diabetes, this or 6 that, making one person more subject to developing a 7 full-blown infection than another, so we don't accept that. 8 MAGISTRATE JUDGE NOEL: Okay. 9 MR. BLACKWELL: And we certainly don't agree with 10 any of the statements they made that all the parties agree 11 that fill-in-the-blank, and so I won't go to rebut them all, 12 but we certainly don't agree. 13 MAGISTRATE JUDGE NOEL: But apparently they don't 14 agree with you every time you say all the parties agree 15 either. 16 MR. BLACKWELL: Except that I'm right, Your Honor. 17 And so I'll say, Your Honor, certain things are not 18 contested is what I will say, so when I say, for example --19 MAGISTRATE JUDGE NOEL: What I'm trying to figure 20 out is what is not contested, and I have a hard time, 21 because you say some things are not contested that they 22 contest. They say some things are not contested that you 23 contest. 24 MR. BLACKWELL: You see -- in terms of what 25 matters on the screen right now, nine published studies that

address the issue of biological plausibility. If they can get up and read to Your Honors even one of them involving the Bair Hugger where they culture bacteria, then there's else to really nothing to argue about. Either they have it or they do not. So when I say that this study supports, I invite them to get up and show Your Honors a story. I don't mean lawyer argument or interpreting documents.

They had corporate documents in the *Glastetter* case too, and the Court found that that was not sufficient because you pick up a document, pair of scissors or paste pot, cut out the things that you want to refer to and even if it's in the context, it's simply one person expressing an opinion and who knows what the foundation was, who knows how credible it was, it's not science or correct. If a scientist a said it. It doesn't make it science because a another scientist says it. This issue --

THE COURT: What's the study that Ms. Conlin was talking about where she said that with the Bair Hugger turned on twice as many or -- either twice or ten times as many bacteria landed in the petri dish?

MR. BLACKWELL: I think what was referred, was that Moretti she was referring to? Or Darouiche? Or Oguz? If it is Oguz, Oguz is the one I showed Your Honor that concluded that there was no increase whatsoever in particles whether or -- bacteria whether the Bair Hugger was turned on

1 or not. 2 THE COURT: I just don't understand how there 3 could be such different readings of the Oguz. We've got 4 Oguz somewhere in this material, right? 5 MR. BLACKWELL: By reading the language, Your 6 Honor, and I quoted the language when I put the Oguz study 7 here for Your Honors to say at slide No. 16 for Your Honors 8 to see exactly what Oquz says. And so this was the study 9 between, again, the Bair Hugger and the HotDog. 10 THE COURT: Yeah. 11 MR. BLACKWELL: You can fast-forward a bit now, 12 Brad, I'm sorry. 13 An important finding of our study was that the 14 type of patient warming did not influence the amount of 15 bacterial sedimentation on either plate keep. So going, 16 please. Okay. 17 THE COURT: Either of you implies that there's 18 I thought she was talking about four different plate 19 positions. How do we know that --20 MR. BLACKWELL: Well, this was the punch line for 21 the Oguz study is here that the ultimate finding of the Oguz 22 study was that -- because I got there quicker, that's the 23 problem. A dastardly trick, Your Honor. So Oguz, which was 24 here, they explained what they did, recent peer-reviewed 25 published research in Oquz shows no association between Bair

Hugger use and increase in airborne bacteria. Not possible to detect any higher bacterial counts on any plate, not one, two, three, four, however many, no increased or higher bacterial counts on any plate in the forced air warming Bair Hugger group versus the resistive warming HotDog group.

And then Oguz has references. And Your Honors can see that I would certainly invite Your Honors to study it because this type of hearing given the issues of reliability underlying expert opinion, I do not turn on lawyer characterizations or slants on what the studies actually say. And so here we're quoting Oguz, and if we have somehow misquoted any part of it, please hold us in account for what this study says. And so we carefully looked at all of these before we made the statement that there isn't a biological plausibility study that favors or supports the plaintiffs' theory, and if there were, we would have been the only one to have seen or found it, ECRI would have seen or found it, as would have the FDA.

If I could briefly look at number 24 because there keeps being a lot of statements made about we don't know what the FDA looked at. We don't know everything that the FDA looked at, but it's pretty clear, they say that what they did in the second box, they collected and analyzed data available to date from several sources, including medical device reports received by the agency; information from

1 manufacturers and hospitals; publicly available medical 2 literature, which most certainly includes the ones we've 3 been discussing, given that the government was discussed all 4 over the place, the international consensus group to ECRI, 5 etc., addressed McGovern; separating and ventilation 6 requirements. So it doesn't tell you what specifically 7 everything that the FDA discussed, but it does say that the 8 FDA did look at the available medical literature, so we know 9 that much. 10 So, Your Honor, unless there are other questions I 11 will stop and sit down. 12 JUDGE LEARY: I do have a question that over time 13 I've been thing of repeatedly but it seems so simplistic 14 that I keep on thinking I shouldn't be reminded of it, but 15 let me ask you this question. It seems undisputed that all 16 -- both parties agree that maintaining normothermia during 17 prosthetic joint surgeries is a good thing and the science 18 behind it is reliable. Would you agree with that? 19 MR. BLACKWELL: I would agree with that, Your 20 Honor. JUDGE LEARY: And that one of the benefits of 21 22 maintaining normothermia is it reduces the risk of infection 23 at the surgical site, correct? 24 MR. BLACKWELL: That's correct. And the FDA said 25 so in its letter.

1 JUDGE LEARY: So if the argument is that the Bair 2 Hugger is a defective device, if you will, is it the 3 argument that a Bair Hugger should not be used at all to 4 maintain normothermia? 5 MR. BLACKWELL: That would be in fact the 6 plaintiffs' argument and that some other warming therapy 7 should be used, not the Bair Hugger. JUDGE LEARY: What I've heard so far today or what 8 9 I've read, there's no reason to suggest that the results 10 vis-à-vis infection are any better or any more improved than 11 the HotDog or any other device, nobody's really looked at, 12 other than in the context of the HotDog device. Is that 13 fair? 14 MR. BLACKWELL: I would say other than the Oguz of 15 course looks at both types of warming therapies, conductive 16 and convective, and comes to the conclusion that there was 17 difference in bacterial sedimentation. 18 And the FDA language which I just put up here at 19 the bottom with FDA continues to recommend using thermal 20 regulating devices which then it distinguished. It says 21 including forced-air warming device because it doesn't 22 distinguish. 23 JUDGE LEARY: And the last question or two I have 24 related to that is that if it's true that maintaining 25 normothermia reduces the risk of infection in surgical

1 sites, isn't the risk of infection using a device such as 2 the Bair Hugger, doesn't that reduce the risk more greatly 3 than not use to at all? In other words, even if you can 4 make an argument that the infection rate goes up if you pass 5 particles or air over the wound site, it still is an 6 improvement over not maintaining normothermia? 7 MR. BLACKWELL: It is, absolutely an undisputed improvement over not maintaining normothermia and not just 8 9 SSIs but for all of the benefits too. 10 MAGISTRATE JUDGE NOEL: They're shaking their 11 heads. 12 THE COURT: And they say -- and I might be 13 misremembering their brief, but I think they said it was --14 that that's only shown with respect to some kind of 15 colorectal surgery, if I'm -- and I'm sorry, I have read so 16 much, if I'm misremembering your brief, I apologize, but I 17 thought they said we don't buy that except -- we don't agree 18 that it's established that keeping an orthopedic patient 19 warm actually reduces, that everybody is just relying on 20 some old colorectal, which, you know, that seemed like there would be a lot of infection in a colorectal. 21 MR. BLACKWELL: Your Honor, here's what's not 22 23 being debated about maintaining normal body temperature, 24 fatal heart attacks are reduced, blood transfusions are

reduced, length of hospital stay, post-operative shivering,

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       and surgical site infections, all reduced. And again, if
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       there is a valid science ultimately supporting the
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       proposition that this is not generally accepted in the
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       community, not just lawyer's arguing things for obvious
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       reasons, let them come forward with it.
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                 And this is -- and it's so well established that
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       you'd be hard pressed, and they would too, to find a single
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       orthopedic surgery where the treating attending
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       anesthesiologist or treater is not going to be warming the
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       patient intraoperatively because it is so much now the
       standard of care outside of this courtroom. It's not even
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               This is a just simple lawyer's argument because
       debate.
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       they don't like it.
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                 MAGISTRATE JUDGE NOEL: Thank you.
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                 MR. BLACKWELL: Thank you, Your Honor.
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                 MS. CONLIN: Mr. Blackwell challenged me to come
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       up with the article, so I'd like to take the challenge. If
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       you look at the Moretti article, I'm quoting from page 4
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       that, In the clinic procedures in which the Bair Hugger was
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       used, the mean bacterial load values were significantly
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       increased.
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                 THE COURT: Oh, so it wasn't Oguz.
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                 MS. CONLIN: Well, I'm going to talk about Oguz in
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       a second.
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                 THE COURT: All your friends told you it was Oquz.
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                 MS. CONLIN: Yeah, well --
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                 THE COURT: You need better friends.
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                 MR. ASSAAD: It's both, Your Honor.
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                 MS. CONLIN: Yeah, it's both, Your Honor. I mean,
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       this was only 20 patients, so they concluded that there
       weren't more infections but it was such a small study that
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       you wouldn't expect to see one anyway. But they found that
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       with the Bair Hugger on, the main bacterial load values were
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       significantly increased on Oquz. They expressly said this
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       is not a statement of safety on the Bair Hugger, and it was
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       minor orthopedic surgeries less than an hour.
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                 And I would urge the Court to look to the Table 2,
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       plate 4, which is the plate that's over the surgical site.
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       They did find a significant increase. What they found was
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       if you add all of the plates together, it was just barely
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       below statistical significance, but they did find at the
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       plate in a minor orthopedic surgery lasting less than one
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       hour an increased risk. The other thing I want to address
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       is --
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                 JUDGE LEARY: Can you specifically report -- or
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       point to the language in that study that you characterized?
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                 MS. CONLIN: Sure. It's Table 2, plate 4 in that
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       table, Your Honor. Oh the safety statement?
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                 JUDGE LEARY: Just the words from the article.
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                 MS. CONLIN:
                              The study may obviously not be
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generalized for an overall safety statement on forced-air warming and it's primarily applicable in this particular surgical setup.

THE COURT: It starts right off with a disclaimer,

it's not used the way we're being asked to use it, right?

MS. CONLIN: Correct. Now Judge Leary raised the question of surgical site infections, and throughout this case there has only been one study ever conducted that has shown a lowering of a risk of surgical site infection due to warming, forced-air warming in a hospital. That's the Kurz study from 1996. We deposed Dr. Kurz and her co-author Dr. Sessler. Both of them testified under oath that they have absolutely -- they would not publish the study today and they have absolutely no reason today to believe that warming a patient during surgery reduces surgical site infections.

And it goes to the point you made about the FDA because the FDA says you should warm intraoperatively because it reduces surgical site infections? Well, I don't think the FDA knows that the authors of that study under oath and cited in our brief disclaimed that study and said we wouldn't publish it today and we know of no evidence that suggests that warming during surgery lowers surgical site infections, and that testimony is in our brief. And so it's not central to the case because there's other ways of

1 warming a patient during surgery if you choose to or as the 2 FDA says, if you think it's warranted. 3 And the exact quote out of Dr. Kurz's deposition 4 is at page 179, line 16, it's Exhibit 59 to our brief. 5 today's -- question, In today's scientific standard, there 6 is no reliable evidence that supports that maintaining 7 normothermia reduces the incidence of infection? Answer, That is correct. 8 9 The FDA didn't know that. The FDA writes a letter 10 and says if you warm, it's going to reduce the surgical 11 site. And that's back to my point which is the FDA only 12 knows what only knows what is put in front of them and 13 absolutely they didn't have that evidence. 14 JUDGE LEARY: Well, let me ask you this. Would 15 you say that it's generally accepted within the orthopedic 16 community that maintaining normothermia is beneficial to a 17 patient's outcome? 18 MS. CONLIN: Yes, I would agree that that's the 19 general statement, but as to surgical site infections, the 20 only thing anyone has ever relied on is the Kurz and Sessler 21 study which the authors themselves say doesn't pass muster. 22 THE COURT: So page 170 of that deposition, 179? 23 MS. CONLIN: 179, lines 16 through 19. And the 24 final point I forgot to make when I was up the first time 25 but -- and I didn't talk about it because I don't think it

1 moves the needle one or the another is that 2017 Augustine 2 study which there isn't any author in it other that Scott 3 Augustine, and for the reasons Mr. Ciresi suggested, we 4 haven't had a chance to question him yet, but we are very 5 much looking forward to it. 6 Dr. Samet didn't cite that in his report. 7 didn't cite it in his supplemental documents --8 MAGISTRATE JUDGE NOEL: I thought Dr. Samet which 9 is why Mr. Blackwell told me --10 MS. CONLIN: He mentioned it in passing in his 11 deposition because the study had just come out, but we 12 didn't file a supplemental report saying Dr. Samet is 13 relying on. He said, you know, in his deposition, one of 14 the reasons he never filed a supplemental report is, unlike 15 McGovern where he kicked the tires, he hadn't kicked the 16 tires on Augustine. It just had come out, and there was 17 material coming in, so there is no expert --18 MAGISTRATE JUDGE NOEL: Just to follow up on the 19 question I asked Mr. Blackwell. My recollection of the 20 argument in one of the prior motions was that the Augustine 21 2017 article was simply not going to be a thing in this trial. Is it still the plaintiffs' position that that's not 22 23 a thing? 24 MS. CONLIN: Yeah, we are relying on our experts 25 reports as filed and they do not -- Samet does not include

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       Augustine as a point of reference.
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                 MAGISTRATE JUDGE NOEL: Okay.
 3
                 MR. BLACKWELL: Can I clarify just one point?
                 THE COURT: Could you just give me one second?
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 5
                 MAGISTRATE JUDGE NOEL: We're never going to get
 6
       to -- as I understand it, we're still on, like, the first
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       group of motions, and it's almost 3 clock.
 8
                 THE COURT: We can solve that by not looking at
 9
       the clock.
10
                 Epidemiology, can you just talk to me a little bit
       about that science?
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12
                 MS. CONLIN: Sure.
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                 THE COURT: I have the overall impression that an
14
       epidemiologist looks at risk in -- against a -- like the
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       background risk, you've got people who are at risk of
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       something and then you introduce something and does that
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       increase the chances that there's going to be a negative
18
       outcome?
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                 MS. CONLIN: Yeah.
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                 THE COURT: But I don't have the impression that
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       what an epidemiologist does is say, look, we've got two
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       products and I'm going to evaluate one against the other and
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       I'm going to say you ought to use this one instead of that
24
       one, so is that epidemiology or is epidemiology saying this
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       will increase, this will increase, or do you know what I
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1 mean? 2 MS. CONLIN: So broadly speaking, an 3 epidemiological study is comparing two groups, so if you 4 take, for example, the McGovern group, one got HotDog, one 5 got Bair Hugger, or the Darouiche study where one was just a 6 patient undergoing surgery and the second group where there 7 was a HEPA air barrier blowing across the surgical site to 8 ensure that no particles came in, and what they do is they 9 rely on observational studies such as --10 THE COURT: But Darouiche is different. I think 11 McGovern from an -- so you think McGovern as comparing --12 they're comparing two commercial products. 13 MS. CONLIN: Yep. 14 THE COURT: And they're saying one we think is 15 better than the other. 16 MS. CONLIN: No. 17 THE COURT: Is that epidemiology? 18 MS. CONLIN: They're comparing two sets of 19 patients, and that's the difference. The epidemiologists 20 aren't typically saying, you know, this is the product that 21 use or whatever, but what they're doing is comparing two 22 groups of individual and they are determining whether the 23 changes between the two groups effect health outcomes. 24 THE COURT: Right. But it's usually a group -- it 25 would be, for example, the HotDog group versus infections

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       generally or the Bair Hugger versus the infections
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       generally, right? Not saying yet a compared, you know a
 3
       Bair Hugger to a --
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                 MS. CONLIN: To nothing?
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                 THE COURT: Right.
 6
                 MS. CONLIN: Yeah, so I can put Your Honor's mind
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       at ease on that because both Doctors Borak, their
 8
       epidemiologist, and Dr. Samet, our epidemiologist, have said
 9
       that the central question here is, you know, between an
10
       alternative forced air warming such as a blanket or
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       conductive warming or all the things that you can do keep a
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       patient warm that don't blow air versus Bair Hugger, and
13
       that's in Dr. Borak's report in paragraph 11. Dr. Samet
14
       said you can either compare it against someone who's not
15
       warmed at all or you compare it against -- the Bair Hugger
16
       against someone who's not warmed at all or you can compare
17
       the Bair Hugger against somebody who uses an alternative
18
       warming modality such as HotDog. So there isn't actually
19
       really any dispute between the experts in this case on that,
20
       and their expert has said that the inquiry that was looked
21
       at in McGovern is the appropriate way to look at it.
22
                 THE COURT: Okay. All right. Thank you.
23
                 All right. I apologize, Mr. Blackwell. You were
24
       about to get up when I said hold on.
25
                 MR. BLACKWELL: Permission from Judge Noel, I'll
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be very, very -- I understand. Very brief. I just wanted to show you all, Your Honors, the actual quote from Dr.

Kurz since that was just referred to by counsel where

Dr. Kurz supposedly said something about there being no benefit to normothermia. And the one thing I know all of us know was what the full examination was. And you see where the question starts at line 14, And earlier I think there were some questions about some comments that had been made either by you or Dr. Sessler that maybe effect size would be only 30 percent. Do you recall those? Yes, I do that recall all. I understand that's just your best judgment, blah, blah.

So I want to make it clear you're not saying or are you saying that evidence that no longer supports the idea that make this normothermia reduces the risk of surgical site infections? I think if I understand you correctly, I'm not saying that. I am saying that I believe maintenance of normothermia decreases infection risk but the effect size might be closer to 30 percent reduction or so which, in effect, is enormously large effect size for any medical intervention.

So it is quite the opposite of saying there is no benefit. And I once again, I just want the record to be clear about what the testimony really is from Dr. Kurz. So thank you, Your Honor.

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                 THE COURT: You know, the exhibit only goes to
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       page 180, at least the one I found, but so we must have a
 3
       page 200 someplace else.
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                 MS. CONLIN: No.
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                 MR. BLACKWELL: Looking here, so Mr. Hulse is.
 6
                 MR. HULSE: It's definitely docket 213-2. May
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       have it some other place as well.
                 THE COURT: Okay. But it's in here somewhere.
 8
 9
                 MR. BLACKWELL: It's a fulsome treatment. Thank
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       you, Your Honor.
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                 THE COURT: Thank you. So, now, where are we?
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       Plaintiffs motions to exclude Borak and Holford.
13
       Mr. Sacchet.
14
                 MR. GORDON: Your Honor, can I indulge the Court
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       for just a very brief bathroom break?
16
                 THE COURT: Maybe it's time for a break. We'll
17
       take a break. We're in recess.
18
           (Recess taken from 2:54 p.m. until 3:11 p.m.)
19
                 (3:11 p.m.)
20
                 THE COURT: Please be seated. Mr. Sacchet.
21
22
                 MR. SACCHET: Good afternoon, Your Honors.
23
       Michael Sacchet on behalf of all plaintiffs moving to
24
       exclude Professor Holford and Dr. Borak.
25
                 Before I delve into the merits of each respective
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motion, I would like to make a few preliminary comments. My intention is to first address the issues with Dr. Holford's report and then to transition to Dr. Borak. The reason being is because Dr. Borak in large part relies on the same analysis that Professor Holford conducted in his report. So my analysis of Dr. Borak's testimony will be much briefer than it will be as to Dr. Holford. However, I promise that the time will be made up with respect to Dr. Borak.

I'd also like to be candid with the Court. When I first reviewed 3M's expert disclosures, I was indeed impressed with their respective backgrounds of Professor Holford and Dr. Borak. They both teach at Yale. They published articles in national journals, and they teach extremely bright students. At the same time, within just a few minutes of reviewing both of their reports, there were a number of issues that stuck out immediately in comparison to Dr. Samet's report and the other expert reports that plaintiffs have proffered in this litigation. And there are four threshold issues that I'm going to identify first.

The first is that unlike Dr. Samet, it is undisputed that Professor Holford relied on 19 sources of evidence, which are in full cited on page 14 of his report, and at his deposition, he admitted numerous times over that he conducted absolutely no independent review of the exigent evidence in this case or in the scientific literature

outside of the 19 documents that were provided to him by 3M. That is certainly not the case with respect to Dr. Samet who outlined in his report a comprehensive search of the scientific literature, which in the end amounted to nearly 200 sources of evidence that he considered in rendering his opinion as to causation.

Numerous courts have concluded across the country that when an expert is spoon fed information in the same manner that Dr. Holford has been spoon fed here, that that shows an improper methodology under Daubert. We have cited those cases in our papers but one in specific is In Re TMI out of the Third Circuit. It's a comprehensive decision. I believe it spans over 75 pages long, but as to numerous experts the Court made that very same determination and excluded experts on those grounds.

The second contrast to Dr. Samet is that
Dr. Holford, and I'll explain a lot about this later, relied
on Exhibit 10 as opposed to the final raw data published in
Figure 7. And I understand that the Court is already aware
of that, and I will explain it in more detail as I progress
in the argument. What I do want to make clear off the bat
is that courts also routinely exclude expert witnesses that
attempt to reanalyze, not just analyze, but reanalyze data
that is published in peer-reviewed studies and do so based
on incomplete or unreliable or inadequate information.

1 In fact, In Re Baycol, which was in this district, 2 Judge Davis did just that and excluded an expert for that 3 very reason. 4 JUDGE LEARY: How is that different than what the 5 plaintiffs' arguments have been with regard to the science 6 cited by the defendants? 7 MR. SACCHET: Could you? JUDGE LEARY: How is the statement that you made 8 9 any different than the type of challenges that the 10 plaintiffs' counsel have made to challenge the defense evidence, scientific evidence? 11 12 MR. SACCHET: The primary difference, Judge Leary, 13 is, of course, peer-reviewed scientific literature as a 14 minimum indicia of reliability. Numerous courts have stated 15 that over and over again. Daubert too, for example, out of 16 the Ninth Circuit said that if an article is published in 17 the scientifically peer reviewed literature that it at least 18 meets the minimum criteria of reliability. 19 And of course, one can attempt to poke holes in 20 that literature and demonstrate that there may or may not be 21 flaws, but as a threshold matter, experts routinely rely on 22 what's published in the study. After all it has peer 23 reviewed and has been accepted and in this case The Journal 24 of Bone and Joint Science is a preeminent scientific journal

on the particular subject matter of this litigation, which

25

is orthopedics.

So it is our view that in any form Dr. Samet had all the right to rely on not just what was published in the McGovern study, but on Figure 7. And I would like to make this point clear right now, and I was going to save it for later, but many scientific studies do not include something of the sort like Figure 7. What they generally include is what is Table 2, which is also in the McGovern study.

And in Table 2, what is reported there are simply the figures that were compiled based on the underlying data, but there is no representation in the normal course of scientific literature as to a graph containing jitter data points as was included in the McGovern study. So that is a factor that distinguishes the McGovern study from many other studies that don't even attempt to depict the underlying data. I hope that answered your question.

JUDGE LEARY: No, I'm not sure that you have.

You're saying it's not proper for a party's expert to recast
the reports of an expert, and yet your colleagues have done
that with regard to the report cited by the defense. How do
you distinguish?

MR. SACCHET: So the main distinguishing feature is that it is our argument that Dr. Holford relied on a flawed data set in attempting to retabulate the data.

THE COURT: So you're saying it's okay to go ahead

and use the data from somebody else's study and come up with a different conclusion as long as you do it right.

MR. SACCHET: I think that happens in tons of litigations. Experts analyze data and if they're relying on appropriate data to reanalyze that data perhaps using a different test or looking at it in a different way that's one thing. But here my argument as I progress this afternoon is to show that that is not what Professor Holford. He did not in fact rely on a reliable source, and I have excerpts of deposition testimony where he admits as much.

JUDGE LEARY: Go ahead.

MR. SACCHET: The third contrast with respect to Professor Holford's testimony and Dr. Samet's testimony, and this also applies to Dr. Borak as well, and this has been a topic that's been discussed already a bit ad nauseum here this afternoon is the difference between DGI and SSI. It is undisputed that Professor Holford and Dr. Borak admitted under oath that they are not one in the same.

Moreover, they admitted that it was improper as a scientific matter to conflate one with the other. And the explanation is simple, they have vastly different ideologies. A surgical site infection requires hundreds if not thousands of bacteria to create an infection because the body naturally has a host defense that can cleanse those

areas of the infection.

But with respect to a deep joint infection on a prosthetic implant, there is no blood circulation. Biofilm can form right over the bacteria area, a very small inoculum, and protect it from antibiotics and other medications that would otherwise be used in other types of surgery. So the proposition that these are the same thing is belied by the very expert reports that 3M has submitted in this litigation.

I don't want to get back into the FDA document, but the same reasoning applies, and it's my view and it stands to reason that the FDA letter specifically used the language SSI. I understand that it arose out of concerns perhaps due to orthopedic infection. But at the same time, when the FDA citing studies that purportedly show that the use of intraoperative warming reduces the risk of surgical site infection, there's not a single published study, none, that show intraoperative warming reduces the risk of deep joint infection, which is the outcome of interest in this litigation.

But, nonetheless, Dr. Borak throughout his report conflates those terms, and he reveals as much in language such as to the extent that this purported hypothetical confounding variable impacts DGI, only then or in that case, it is a confounder. Never says that it is, only says if

this SSI measure impacts DGI in that case there's a confounder. That's not a conclusion. That's speculation and should be excluded.

The fourth difference between Dr. Samet and Professor Holford and Dr. Borak is that they attempt to opine on general causation but at the same time all that they have done is critique a single study. That is not the practice of epidemiology as The Scientific Reference Manual makes clear. Causation is a judgment informed by scientific expertise based on multiple lines of evidence. And I do not know how methodology could be sound when one is attempting to opine on general causation based on 19 sources of evidence that 3M provided to that expert. That is just not the totality of evidence.

We included numerous admissions from both of these experts in our papers. None of them have been disputed. 3M has responded to virtually none of them. They're sitting there on the paper apparently uncontested. What 3M did instead is violate Rule 703. They've cited more than ten, perhaps even 20 documents in their opposition papers to our motions to exclude Professor Holford and Dr. Borak that were never acknowledged, cited, mentioned by either one of those two experts. That filling a brief is improper, and none of those exhibits can rehabilitate the admission that both of those experts gave us at their depositions.

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In my view, what that showcases is one thing and one thing alone, their testimony is unreliable and there's an ex post facto attempt to rehabilitate them after the time in which they could have done so, so none of those exhibits should be excluded, and I'm happy to enumerate them and I'll just enumerate the most basic examples: DX6, DX7, DX8, DX11, DX19, DX20, DX21, DX34, docket 231 --COURT REPORTER: I'm sorry, I lost you at DX21. Repeat it please. DX21 -- and actually I appreciate MR. SACCHET: the interruption because DX21 is like the most ripe example that I could possibly bring up. Dr. Holford admitted at his deposition that he didn't rely on a single study to show that an antithrombotic can confound deep joint infection, not a single one. Now, four months after I took his deposition, 3M has ginned up a study by Brimmo et al from 2016 that purportedly shows that a use of an antithrombotic increases the risk of infection. I'm going to get into it in more detail, but not only is it improper under Rule 703, but it doesn't even move the needle because it's not the same regimen that was used in the McGovern study. Although, it involved Rivoraxaban, but it did not involve Tinzaparin. involves a completely different antithrombotic. And the Glastetter court made clear that when you evaluate

confounding, even the smallest difference in the molecular structure can determine whether or not a variable is a confounder, so even that inadmissible evidence does not save Holford's opinion as to confounding.

With respect to Plaintiff's particular motion -Oh, so other exhibits, excuse me, I ended at DX21,
DX34 is an internal document from 3M, docket number 231 and,
the May 18, 2017 hearing transcript. In addition to that,
there are numerous excerpts of deposition testimony and
other exhibits that were shown at those depositions that I
do not believe the experts have reviewed and those include
DX9, DX10, DX12, DX17, DX25, DX26, DX28, DX31.

As to Professor Holford in particular, plaintiffs have moved to exclude his testimony in its entirety, and we have identified seven particular topics of testimony. It is plaintiffs' view that the first four topics of testimony 3M has failed to respond to and are, therefore, waived and they should be excluded on that basis alone. Those include Professor Holford's use of competing statistical tests, his opinions about comparing hospital infection rates and time trend data, potential confounders from SSI measures, and his opinions about general causation. 3M has responded to our arguments regarding reclassification of patient data, the new start date, and the potential confounding from the change in antibiotic and antithrombotic, and I would like to

move through those seven topics going quite briefly through the first four because 3M has not responded to them and emphasizing the last three as I finish the first four.

The first topic is Professor Holford's flip-flopping, if you will, with respect to statistical tests throughout his report. I'm going to back up for a moment and, hopefully, enlighten the Court that the authors of the McGovern study used a statistical test called chi-square. It's a commonly used test. I learned it in college in my Statistics 101 class. It's used in a lot of studies. And in fact, Professor Holford uses it probably more than not in most of his studies, and he also used it in particular circumstances that are exactly the same as the McGovern study but for some unknown reason he chose not to do so here.

Instead of applying chi-square, Professor Holford uses a test called Fisher's exact test. And Fisher's exact test has been criticized by numerous statisticians and academics across the country. When I deposed Professor Holford, he recognized as much because in general it can change a statistically significant value to a non-significant value. Now all of this is more or less besides the point because whether or not there is a statistically significant association to the McGovern study or whether it's just below or above statistical significance

should not be determined -- the determination by which the Court adjudges the McGovern study. But I would like to point out why I believe that Professor Holford's testimony is litigation driven.

There are two rules that statisticians consider in determining whether to apply chi-square as the McGovern authors did versus Fisher's test, which is the test that Professor Holford used, and he used it in order to change the P value.

The first rule is if the population of the study participants exceeds one thousand, you should use chi-squared. There is no dispute that the McGovern study had one 1,437 patients. Obviously, satisfying that criteria.

The second criteria are expected values as opposed to reserved values greater than five. And I don't want to wade too far into the weeds, but the statistics show that expected values would be greater than five in which case you should apply chi-squared.

When I asked Professor Holford why didn't you apply chi-square when the expected values are greater than five? This is what he said. I asked, him, "So based on your own bias, you relied on the actual values reported in the study itself as opposed to the expected values that most statisticians rely on to determine whether to apply Fisher

1 or not." "Yeah. That's probably less commonly used on 2 observed values, but I prefer to do that because I think in 3 this case actually the expected values are greater I believe 4 than the nominal five, if that's the rule you're using." 5 So Professor Holford not only admitted that he 6 decided to use Fisher's test instead of chi-squared based on 7 his own bias, but he also admitted that the expected values were greater than five, which counsel it must apply 8 9 chi-squared. I believe that this excerpt testimony alone shows that Professor Holford's decision to use Fisher's test 10 11 instead of chi-squared depended on his own bias, which is 12 not reliable and is not a valid methodology by which he 13 attempted to reanalyze the data in the McGovern study. 14 I will also mention that In Re Lipitor, which 15 Mr. Blackwell in his opening argument said it was a wonderful case that is on all fours with this case. 16 17 agree. In that case, they excluded the expert because he 18 flip flopped between different tests just as Dr. Holford did 19 in his report. At the beginning of his test, he applied 20 Fisher's test and then just as Mr. Gordon admitted in his 21 argument, then he suddenly switched to chi-square. I would 22 arque that he did so to manipulate the results so he could 23 achieve the desired result. 24 The second topic of testimony that 3M has not 25 responded to in its opposition is Professor Holford's

testimony regarding hospital infection rates and time trends. The background of this argument is that in the McGovern study, the rate of infection among the Bair Hugger group was three percent. Dr. Holford determined that that rate is out of control, and he got there based on reviewing data from other hospitals that purportedly showed a rate of infection of 0.6 percent.

Now, I was struck by this argument when I read it because the first thing I noticed when I was preparing for the deposition is Dr. Holford didn't compare apples to apples. We keep hearing about apples to apples, But that's not what he with did. He compared apples to oranges. He evaluated the 2008 to 2010 period for the Bair Hugger, to a 2010 to 2015 period among other hospitals that may or may not have used conductive fabric warming devices instead of the Bair Hugger.

I would argue that to the extent that there was a decreased risk of DGI or rate of DGI, that it perhaps aligned exactly with the McGovern study, and the use of conductive fabric warming devices instead of the Bair Hugger device is what caused the decrease.

The third issue is that Dr. Reed, who is one of the primary authors of the McGovern study swore under oath that the hospitals in the UK are notorious for under reporting data and that one could not rely on rates reported

1 by other hospitals such as the very ones that Dr. Holford 2 relied on in performing his analysis. 3 Now, outside the courtroom, Dr. Holford has 4 published numerous articles explaining you must rely on 5 complete data, otherwise the analysis will suffer from data 6 artifact. It's exactly what he did here, and here's another 7 exhibit to prove that. 8 When I was cross examining him on this very 9 question, I said Dr. Holford, do you know the degree of 10 accuracy of the calculations by which you're comparing the 11 Bair Hugger period to these other hospitals? "I don't know 12 the degree of accuracy. That was not part of the data that 13 I was provided as to the measure." 14 So I then asked, "and you didn't ask for the 15 data?" "No." So I said, "To the extent you argued that the 16 infection from 2010 to 2015 was .6 percent, are you aware 17 that there was a significant decrease in deep joint infections in the NHS from 2013 to 2015?" 18 19 "I didn't have data specifically relating to 20 these." I think this excerpt alone shows that Professor 21 Holford did not use reliable methodology in comparing 22 hospital infection rates. 3M has not responded to that 23 argument either. 24 The third topic that 3M has not responded to is 25 hypothetical confounding from SSI measures. Throughout

1 Dr. Holford's report, he cursorily states, yeah, SSI 2 measures may have confounded the McGovern study, and they 3 should have been controlled because had they not been, that 4 could have resulted in the increased risk of infection that 5 was reported therein. 6 What he told me at his deposition is that he 7 didn't study the impact of surgical site infections on deep joint infection. That's at page 367. Surgical site 8 9 infections are not the same as deep joint infections. 10 That's at page 304. He does not have expertise to evaluate 11 the relationship between deep joint infections and surgical 12 site infections, and at bottom he had no scientific basis 13 whatsoever to testify that surgical site infection 14 interventions may have confounded the DGI rate. And here's 15 the admission where he says as much. I asked him, "your report concludes that the SSI 16 17 bundle may have had an effect on deep joint infection rates, 18 correct?" "Yes, the things that they were doing to control 19 SSI may have had an effect." 20 So I said, "You have no scientific basis to make that conclusion." Answer, "I'm -- no, no, I'm just assuming 21 22 that it does." This is ipse dixit. 23 The fourth topic of testimony that 3M has not 24 responded to in our papers deals with Professor Holford's 25 general causation findings. As I mentioned at the outset,

epidemiology is the practice of considering multiple lines of evidence and the totality of evidence. Professor Holford did not do that. Instead he only offered statistical evaluation based on the McGovern study, and he did not go beyond his biostatistical analysis.

And in this slide, we went through that. In the very beginning of the deposition, I asked him, "Are you offering testimony as to any of the subject matters," that I had previously went through with him, and he said, "I'm offering testimony on statistical aspects that relate to the Bair Hugger. I don't know if you think that's relevant or not."

So I sat on that, and I waited until the end of the deposition, and then I circled back and I said, "Do you agree with the statement from The Reference Manual on statistics that in the end deciding whether associations are causal typically is not a matter of statistics alone but also rests on scientific judgment?" Answer, "Yes."

I believe that slide in and of itself shows that Dr. Holford did not consider more than statistics when he opined that the Bair Hugger was not a substantially contributing cause of deep joint infections and, therefore, he should be excluded from rendering these opinions in this matter.

I would also like to point out that with respect

to Dr. Holford's testimony at his deposition as opposed to what he wrote in his report, he actually corroborated Dr. Samet's opinions about general causation. On the record, Professor Holford admitted that temporality was satisfied. He also admitted that temporality is the only prerequisite under the Bradford Hill criteria by which must be met in order to show causation, and he said that was readily satisfied here. And as my colleague Ms. Conlin pointed out, Dr. Borak made the same assertion.

The second point, and this has been alluded to throughout argument today. Professor Holford also said even an odds ratio less than 2.0 can be sufficient to show causation. That's important. Because even if for the sake of argument, which I don't think is right, that the McGovern 3.8 odds ratio is not correct. Even if it's above 1.0, one can still rely on that to show causation. That's what he admitted on the record.

He also admitted on the record that when an odds ratio is above 2.0, that you can rely on that to show specific causation in a similarly situated individual.

That's not only met here based on the risk ratio reported by McGovern, but even if you use Fisher's test, which is what Holford did. And even if you assumed that there is one less Bair Hugger infection and one more HotDog infection, the odds ratio is still 2.76, which is above the threshold by

which Professor Holford admitted we could prove specific causation.

He also admitted that consistency was satisfied, which is the third factor under the Bradford Hill criteria, and he said that in some cases one can assume a relationship between particles and bacteria; therefore, agreeing with the chain of infection that plaintiffs have presented in this litigation throughout today's argument.

The fourth thing he admitted was that studies can show coherency if they are mechanistic. And, moreover, that all of the concern as of late with respect to water heater cooler devices and the FDA recall that has ensued involved or coincide the same concern with respect to the Bair Hugger.

I'd like to now jump into the three topics of testimony that 3M has responded into their papers. And the first is, obviously, the hot topic of the reanalysis of the McGovern study. As background information, and I know Mr. Gordon has made this clear, and so has Ms. Conlin, but it bears repeating, the published study reported 32 out of 1066 patients incurred a deep joint infection during the Bair Hugger period.

On the other hand, there were three reported

HotDog infections out of a population of approximately 371.

Instead of using that data, Dr. Holford opines that in fact

there were 31 Bair Hugger infections, one less than the 32, and there were four HotDog infections instead of the three that are reported in the study.

been brought up this afternoon, and I'm happy to answer questions about it, but, again, the legend of that graph states that it is the raw case data underlying the numbers in Figure 2 of the study, the particular data points are reflected therein in both arms of the study. But instead of relying on that information, Professor Holford relied on what's been known as Albrecht Exhibit 10. I'd like to be clear that Albrecht Exhibit 10 was not produced by Mr. Albrecht. It was not produced by any of the study authors.

I also want to make clear that Exhibit 10 is kind of a statistical matter, is not even machine readable. When you do statistical analysis, you generally do it based on a CSV file, which is a common separate eval file. The three or four hundred page document that is so-called Exhibit 10 is not that and would not be able to be plugged in and generate data based on that fact.

Before I critique Professor Holford testimony on this point, I want to go back to the idea let's assume that there was one less Bair Hugger infection, and let's assume that there was one more HotDog infection, if we make that

assumption, Professor Holford's report states on page 3 that there would still be nearing a tripling of the risk, an odds ratio of 2.76, and that the P value, even though we dispute that statistical significance matters much, is still significant at 0.048 below the conventional threshold of .05. That's based on Professor Holford's own analysis.

If you apply Fisher's test, which is what he did, the odds ratio stays the same. It's still 2.76 above the 2.0 doubling of the risk threshold, and the P value instead of being .04807 goes up by a few thousandths of a decimal point to .0507. And based on that difference of a few thousandths of a decimal point, Professor Holford says the McGovern study doesn't mean anything.

The United States Supreme Court in the Matrix decision in 2011 denounced that very reasoning holding that medical experts do not need to rely on statistically significant data in order to opine on causation. Moreover, the American Statistical Association came up with guidelines in 2017 that said bright lines should not be drawn based on conventional standards of statistical significance because to do so would invite unreliable conclusions. That's exactly what Professor Holford opines here.

Moreover, Dr. Samet at his deposition, yeah, they asked him what if there was one more or one less? Dr. Samet's response, it wouldn't change my view. You still

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have almost a tripling of the risk. You still have significance, whether it's clinical or statistical. It stands of its own weight. Dr. Reed, one of the primary authors of the McGovern study, same exact testimony from him. And this is what I want to emphasize. We've heard probably an hour or two of argument about this particular issue. 3M has predicated its expert reports on the existence of one more or one less infection. They're now up here arguing we can't prove causation as a result. Let's look at what they told Mr. Albrecht. My friend on the other side during that deposition asked Mr. Albrecht a few questions about it. then this is what he said: "I don't want to focus too much on the difference between 31 and 32 and 3 and 4, because I don't think this is a good use of time at this point." "Okay." So the very point of all of this argument today was expressly essentially said to be a waste of time at Mr. Albrecht's deposition. It really doesn't add up in my view, and I think this excerpt proves that point.

was expressly essentially said to be a waste of time at Mr. Albrecht's deposition. It really doesn't add up in my view, and I think this excerpt proves that point.

Notwithstanding the fact that 3M and its attorneys have admitted that it's an immaterial distinction, Professor Holford's reliance on it is fatally flawed for a number of reasons.

The first is that he had no foundation whatsoever

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       to believe that Exhibit 10 is the final data. And, Judge
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       Leary, that's where I distinguish reanalysis of published
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       data based on accurate data from reanalysis based on
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       inaccurate or incomplete data.
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                 When I deposed Professor Holford, this is the
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       colloquy that ensued.
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                 I said, "Mr. Gordon," which is 3M's counsel,
       "doesn't know if Exhibit 10 is the original data set."
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                 His answer: "Okav."
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                 I then asked, "Mr. Albrecht also doesn't know
       whether Exhibit 10 is the original data set." "Yeah."
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                 "Mr. Borak," the other epidemiologist at 3M has
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       disclosed in this litigation, "also doesn't know whether
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       Exhibit 10 is the original data set."
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                 "Okay."
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                 "And you don't know."
                 "Answer: I don't."
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                 I don't know how a statistician can't opine that a
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       peer reviewed study is fatally flawed when he doesn't even
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       know if it's the final data set. That is the quintessence
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       of unreliability under Rule 702 and 703, and he should be
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       excluded.
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                 If that were not enough, and I think it is by any
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       reasonable doubt, he also admitted on the record that
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       Exhibit 10 was incomplete. He learned for the first time at
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the deposition that that exhibit was missing an entire page of deep joint infection data during the Bair Hugger period. He didn't know that before because he admitted to me that he didn't go through by hand the exhibit. He didn't go through the tabulation by hand. He didn't review it. He just relied on what 3M gave him, and this is what he told me: "I didn't see that there was a missing page in the data set that I used to analyze." Under this Court's Order In Re Baycol, he should be excluded based on these two admissions alone. The last thing I would like to mention is when I examined Dr. Holford, I put Figure 7 side by side with Exhibit 10 in McGovern Exhibit 16, which is the very document that Mr. Gordon, my friend on the other side, presented to you this afternoon, to have allegedly assumed that one of the infections was miscoded as forced air warming instead of conductive fabric warming. When I showed Professor Holford Figure 7 side by side with the data set that underlies that published manuscript number 10, Professor Holford admitted on the record that Exhibit 10 was missing a data point that is reflected in Figure 7 of the McGovern study, specifically in September of 2008. He admitted that on the record. Dr. Holford also admitted on the record that he did not analyze data that the McGovern authors collected

after publication of the study so you heard a lot of allegations by 3M that the McGovern studies or the McGovern authors may have intentionally chosen this particular data or this particular day to achieve statistical significance. Unfortunately, the McGovern authors collected six more months of data after the end of the McGovern study doubling the size of the population of the HotDog group from approximately 371 patients to around 700 patients or 800 patients.

The same exact results. Statistically significant, even though we did not depend on that, and all show the ratio of 3.6; albeit a .2 decrease in the odds risk ratio, almost a quadrupling of the risk based on an expanded data set that Dr. Holford admitted at his deposition contradicted his analysis in this case.

Dr. Holford also did not review the deposition testimony of the authors who plainly testified that they did not know whether Exhibit 10 was the final data set based on a mere showing of this 300 page document. Not a single author in this case has said that Exhibit 10 is the final data set. No one. Not Mr. Albrecht, not Mr. McGovern, not Dr. Reed, not Dr. Belani, and not Professor Nachtsheim.

None of them have said that Exhibit 10 is the final data set. And that is what 3M has hung its hat on in this case to show the purported invalidity of the McGovern study even

though if you add infection or take one away, there's still a 2.76 odds ratio.

JUDGE LEARY: Somebody mentioned something that maybe has been bothering me a little bit in terms of the comments that you've made, Counsel. The original challenge to McGovern was whether or not, whether that study was scientifically reliable, and in effect whether or not it was properly motivated, and at issue was Augustine and Albrecht's involvement in that study. And certainly there were internal communications between Augustine and Albrecht that questioned the purpose, the motivation under which that study was undertaken.

And I'll draw up, you know, language from criminal case law, where you talk about the fruit of the poisonous tree. And when you see a motivation like Augustine's, and you see the internal communications between Augustine and Albrecht, and then you see some change in the way information is graphed, and some change in the statistics, you begin to wonder about the overall validity and the motivation of the study. What you're now suggesting is to bootstrap, if you will, the integrity of that by in effect recasting it and trying to undercut the opinions that Holford holds as a way of legitimizing McGovern. But still in the first instance in terms of assessing scientific reliability, the motivation behind that study, and the

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desire for a certain outcome, I think you just can't will that away from questioning the analysis by Holford, because 3 they're two different things. And when somebody approaches 4 a scientific study with a lack of objectivity, I don't think you ever move away and certainly perhaps not in this particular study from that motivation, regardless of how a party wishes to undercut somebody else's analysis of that information. And that's what troubles me. 8 9 MR. SACCHET: If I could briefly respond. So this 10 is the first point is not in answer to your question, but I do want to make it clear that for purposes of the motion to 12 exclude Holford, he did not rely on the documents that were 13 put up earlier this afternoon that purport to show any such 14 type of motivation. So I just want to note that for the 15 purposes of excluding Holford. 16 Now as the real question and the real, answer this 17 is my response. I haven't seen a document that's been 18 produced that is specific to the McGovern study that has any 19 such suggestion about improper motive for conducting that 20 study. JUDGE LEARY: Well, how about the internal 21 22 communication between Augustine and Albrecht? 23 MR. SACCHET: I have not seen a document this 24 afternoon that suggests that that is particular to the 25 McGovern study itself.

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                 THE COURT: It was this morning.
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                 MR. SACCHET: This morning, I apologize.
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                 THE COURT: We saw it this morning.
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                 MR. SACCHET: I believe the date of that e-mail
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       was after the McGovern study was published.
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                 THE COURT: Before it was published.
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                 MR. SACCHET: Before it was published.
                 THE COURT: The e-mail said we've achieved
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       statistical significance and that was all before it was
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       published.
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                 MR. SACCHET: So that particular e-mail, the next
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       e-mail line beneath that is a statement from Dr. Reed in
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       which he says I have no doubt that if we continue to collect
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       data, it will show the same results. That it's not
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       necessarily a panacea for that statement between Albrecht
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       and perhaps it was with Augustine. But what I will note is
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       that the McGovern authors are some of the most well
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       credentialed people in academics around.
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                 I mean Mr. Albrecht was to be sure part of that
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              Who is his supervisor? Professor Nachtsheim.
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       took Professor Nachtsheim's deposition as well. He's a
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       tenured Professor at the Carlson school of Business here in
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       Minnesota. He's taught statistics for over two decades.
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       Professor Holford admitted at his deposition that Professor
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       Nachtsheim is an expert in statistics, and in fact, was
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admitted to the college of statistics well before Professor Holford. And he reviewed all of this information and continues to stand behind the results of the McGovern study.

And so too with the other authors. Dr. Reed, one of the foremost orthopedic surgeons in the UK. Dr. Belani, the head of anesthesia at the University of Minnesota.

Dr. McGovern, I took his deposition as well. The guy could not be more black and white. He would not give me a single piece that I was trying to get from him. He made clear that he has no doubt, he has no hesitation that there were some type of fraud or manipulation of the data set.

So whether or not there's an e-mail saying, okay, we got statistical significance, the authors still conducted more analysis after the fact that show the same results, as I just mentioned a few minutes ago, based on an expanded a data set a statistically significant finding with the 3.6 odds ratio. So in my view, this whole suggestion about Augustine has been and always will be a red herring. The science shows what is in that study the presence or difference of one or more infections does not change that much the ratio or the significance of the study. And in fact, as I showed even 3M's counsel didn't want to waste time asking the question.

I would also like to note, Your Honors, that in the *Viagra* case that was touched on briefly this morning, it

appears to be a grounds by which 3M argues that in Viagra too the Court excluded a study because of data discrepancies and miscoding. Two points of interest, one, the plaintiffs all but failed to dispute that finding. Their arguments were hollowless and the Court found as much.

That is the not case here where their own expert is admitting that he has no basis to rely on Exhibit 10 to prove a mistabulation error. Second, 11 out of the 21 patients in the *In Re Viagra* study were miscoded as to exposure. That's nearly 50 percent. Here at best assuming arguendo that there is one miscoded infection, it's one of 32, and it doesn't change as I keep saying the odds ratio of being above 2.0 or above 1.0, which Holford agrees can still shows causation.

That is the scope of the argument as to the retabulation or reanalysis of patient data. And I would like to re-emphasize again that Holford admitted on the record he had no foundation to rely on it and that it is missing data and, therefore, he should be excluded on that grounds. Under Baycol, under the Supreme Court case in Watson, which we cite, and the host of other cases in footnote 2 in our reply brief.

The sixth topic of testimony that we have -
JUDGE LEARY: Let me ask you this Mr. Sacchet, you
know, in reviewing the depositions in this case, it's

represented that you talk about the integrity of the authors of the McGovern article. Co-author Michael Reed was blunt in his deposition, was blunt in his deposition according to the defense. Asked why the authors said this, Reed replied, because it doesn't. The it, the paper, doesn't establish causation. And then Albrecht says the study does not establish a causal basis. And that's, there's a lot of confounding factors that could be at play.

In a communication with another research, Albrecht admitted that he had admonished Augustine apparently to no effect, not to overstate the studies findings. "This is one of those things," this is what Albrecht says, "where we can step close to the line, and we do have important information to present that clinicians should be aware of, but we also have to be careful that we do not state claims regarding proof of infection reduction. Unfortunately, Scott Augustine likes to say that he's convinced of such a relationship even though I tell him it is unsupported, and I do not agree."

Again, this was pointed out at a prior motion,

Albrecht finished by saying, "Well, that is the difference
between research and marketing."

So when you talk about the authors standing by their conclusions and the data in McGovern, you've got Reed and Albrecht saying that there's no causation here.

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MR. SACCHET: So if I could draw a very fine line, Your Honor, all of the authors stand by the increased risk of the Bair Hugger, which is what is presented in the McGovern study, and that is an association between the Bair Hugger device and deep joint infection. JUDGE LEARY: But they're saying there's no causal relationship between the two. MR. SACCHET: Not a single observational study of any kind, not the McGovern study, not the thousands of others that have been published can ipso facto prove causation. It's an oxymoron. Observational studies do not prove causation but associations can help show that based on epidemiology and the totality of evidence. So when Mr. Albrecht is discussing about what Dr. Augustine has said, I wouldn't doubt that Dr. Augustine has said, yeah, the McGovern study proves causation. It's wrong. That is incorrect, but Mr. Albrecht is not saying that he doesn't think that the McGovern study shows an --JUDGE LEARY: Mr. Albrecht doesn't say what you are saying he said. And Dr. Reed doesn't say that what you're saying is what he said. They don't throw out those distinctions. MR. SACCHET: They say that the McGovern study doesn't prove causation, which is exactly what I'm saying. I'm saying that the McGovern study shows an association of

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increased risk and that's what observational studies do. They do not, as a matter of law or science, prove causation. And not a single author of the McGovern study has ever said that the McGovern study proves causation. But they do all stand behind the fact that that study shows an association, which is not the same as causation between the Bair Hugger and deep joint infection. JUDGE LEARY: I understand what you are saying. MR. SACCHET: Okay. In The Scientific Reference Manual, it's the opening line or the opening paragraphs of the section on epidemiology. Associations don't prove causation. They show a relationship, and based on that relationship and other evidence, we can consider to determine as a matter of scientific judgment and expertise whether there is causation. And the authors of this study, to be honest, Your Honor, they're not epidemiologists. They didn't consider the great weight of evidence. They conducted an observational study. And at the end of the study, to be sure, they said as they should that that study does not prove causation. THE COURT: What do you mean "as they should?" Why do you emphasize it like that? MR. SACCHET: Because no observational study If there was any other suggestion, that would be

1 scientifically problematic. 2 THE COURT: Well, where in the study do they say 3 we find an association? 4 MR. SACCHET: Well, the P value of .0216 that is 5 reported in Table 2 of the study is below the conventional 6 line of statistical significance IE.05. 7 THE COURT: But they never say we find an association. 8 9 MR. SACCHET: They say we find an increased risk 10 of infection of 3.8. 11 THE COURT: Where? 12 MR. SACCHET: If you look on the very first page 13 of the study in the abstract. And in fact they also do say 14 this study does not establish a causal basis for this 15 association. And that is on page 1543 beneath Figure 7 in 16 the first full paragraph, they use the word "association." 17 And as I also mentioned, the last paragraph of the 18 abstract on the first page says, "a significant increase in 19 deep joint infection as demonstrated by an elevated infection odds ratio 3.8 P value .024 was identified during 20 21 a period when forced air warming was used compared to a 22 period when conductive fabric warming was used. Error-free 23 warming is therefore recommended over forced air warming." 24 So the authors have not only provided a risk 25 ratio, which quantifies the increased risk which we heard

1 earlier this morning, but it also says that there is an 2 association. 3 THE COURT: They're reporting what they found, and they're doing a statistical analysis of what they found. 4 5 MR. SACCHET: Indeed. 6 THE COURT: But the sentence, they never say we 7 have and we therefore conclude that there is an association 8 between the use of the Bair Hugger. They say, I mean 9 there's nothing in here that would cause the disclaimer 10 about how we didn't have complete recordkeeping, and there 11 were other things that changed during this time period, but 12 here's we have this with it, and here's what the statistics 13 show. But a conclusion from those that there is an 14 association that can be isolated to the Bair Hugger as 15 opposed to the Bair Hugger plus all the other changes 16 doesn't appear. 17 MR. SACCHET: So my response, I don't mean to be 18 evasive, but it's generally accepted or I'll say it's 19 universally accepted in epidemiology and statistics and the 20 medical literature that if you report a P value that is 21 below the conventional line of statistical significance, 22 that shows by itself inherently an association. 23 THE COURT: Okay, but you have to look at what the 24 P value purports to demonstrate. And as they point out, the 25 P value, they don't isolate for the other confounding

1 factors incoming up with that P value. 2 MR. SACCHET: So I'm going to discuss confounding 3 factors and explain why plaintiffs do not believe that they 4 are in fact confounding factors. 5 THE COURT: I think we've been pretty well 6 educated on what your arguments are with that. But I'm 7 talking to you from a statistical standpoint when you are interpreting the amount of significance to give to the P 8 9 value, what went into the determination that there was a 10 statistically significant difference, there were a number of factors that contributed to that P value. 11 12 MR. SACCHET: Okay. 13 THE COURT: And so that's why I'm asking you where 14 do they say we're isolating out just the Bair Hugger. You 15 know what I'm saying? 16 MR. SACCHET: I understand now. And the answer I 17 think is what you already know, which is they did not 18 isolate those variables out in order to generate a different 19 P value. So that P value is dependent on those hypothetical 20 confounding variables not being controlled. 21 THE COURT: Right. And so there's a difference 22 between saying that there is, the association that is -- I 23 mean there is an association of the statistics are what they 24 But to then say that that means that they have found

an association between the Bair Hugger and increased

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infection disregards the author's own statements of concern about the fact that the Bair Hugger wasn't isolated in coming up with that.

So when you say they stand by their conclusions, what is that conclusion? You're putting these words about the association a little bit in their mouths. I mean, it does say, therefore, be cautious about using this with, you know, until there's more study. The Bair Hugger was one of the things that went into -- the Bair Hugger is one of the factors that went into the P value, so you already know about the watching to make sure that people are ready for surgery and so on.

But one of the other things that you might want to be aware of is the use of error-free patient warming alternatives. And they might be recommended in an environment where you need an ultra clean theater. But that's not the -- I mean here's what we found there's a bunch of things here, and one of them is this, so, hello, study more.

MR. SACCHET: I understand. What I would say, and I don't mean this to be a non sequitur, but all observational studies may or may not have confounding factors. You can't control for every particular variable. It's impossible. You just can't do it. And, nonetheless, courts have made clear that observational studies can be

relied on, and they often are relied on.

observational study, but just because observational studies as almost all studies aren't going to be perfect doesn't mean that every observational study comes in. I mean so it's like observational studies can't be perfect, therefore, ours is really, really perfect as even stated by the authors, and that that you can't evaluate the level of imperfection because courts have said that observational studies, not all observational studies come in.

MR. SACCHET: I agree. What I would say in response is if there are concerns on your behalf, Your Honor, about particular variables that are lurking that the authors alluded to as to disclosed or undisclosed potential confounders that could have impacted the association, I'm well versed in discussing those and explaining why in fact as a scientific matter in an epidemiologic matter they are not confounders.

experts say about why doesn't -- I mean I guess I know they say -- okay, what do they say about that big peak?

Remember, we saw the raw data just before there was a change. It's the prior version of Figure 7. What do you folks have to say about that big pre-March 2010 increase when there was the different -- what's the P value on that

1 one? 2 What do your experts have to say about the fact 3 that there was that big, big jump, you know, that's in the 4 5 MR. SACCHET: Okay, the first part of my response 6 is the threshold response is one can not assume in a 7 scientific matter that DGI rates are always the same within 8 each month. I mean they can vary depending on, you know, 9 who comes in, what kind of -- is it an orthopedic surgery, 10 you know, what's going on? I mean all of these different 11 variables can change that factor so to assume that the DGI 12 rate every single day, every single week, every single month 13 of every single year is always going to be three percent, 14 doesn't make sense in my view. I mean that three percent at 15 some months could be five percent and other months could be 16 two percent and the average is three percent. 17 THE COURT: I can't remember the name of the drug 18 but there was --19 MR. SACCHET: Rivoraxaban. 20 THE COURT: That one, so when they were using that 21 what you said, there was this peak. What do your experts 22 say about the relationship, the correlation, if any, between 23 the use of that drug you said and that peak? 24 MR. SACCHET: Okay. So the peak coincided in 25 part, not in full, but in part when the change in

antithrombotic regimen went from a low weight molecular heparin called Tinzaparin to Rivoraxaban and then back to Tinzaparin. So, in fact, the last month and a half or two months of the Bair Hugger period, the patient still received Tinzaparin. And that is in fact also when that spike occurred.

But with respect to whether there was confounding, and I think that's the question, there is not a single study that shows that the change from Tinzaparin to Rivoraxaban, the two different antithrombotics that were used in this case results in an increased rate of deep join infections. There's not a single one. And as a matter of scientific methodology, in order for a scientist to conclude that a factor is a confounding variable, it must not only be related to the independent variable, it must also be related to the dependent variable. In other words, it must be an independent risk factor.

THE COURT: And the other studies showed that that's not an independent risk factor.

MR. SACCHET: Yeah. So there was a 2010 study by Jenson and Reed. It evaluated the exact same protocol that was used in the McGovern study, changed from Tinzaparin to Rivoraxaban. It did not find a meaningful difference in deep joint infection rates between the change in those two antithrombotics.

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After that, Reed collaborated with another scientist named Jamison in 2013, a few years after publication of the McGovern study. And they conducted a prospective observational study evaluating the change between a low weight molecular heparin very similar to Tinzaparin and Rivoraxaban in 13,000 patients. The deep joint infection rates are essentially identical. The P value I think is .7, extremely high. Based on that study, not only Dr. Reed but Professor Nachtsheim, who again is a tenured professor of statistics at the University of Minnesota had unequivocably ruled out Rivoraxaban as a confounding factor. THE COURT: So then you still have the spike, so I suppose if the drugs themselves wouldn't be at how do we know that there wasn't a difference in how those drugs were administered? One was administered one way, one was another. So if it wasn't, not it wasn't accounted for at all, then the relevance of the studies that show that the drugs themselves don't make a difference. I mean so your

MR. SACCHET: Our experts say that they've reviewed the scientific literature, and there's not a piece of evidence that suggests that antithrombotics confound DGI rates.

experts say this is just like an anomalous jump?

THE COURT: Are they asked specifically about this

1 jump? 2 MR. SACCHET: They've seen the increase in 3 infection and do not believe that that change in rate, so --4 THE COURT: But they couldn't have seen it because 5 this didn't get published. This is in one of the 6 previous --7 MR. SACCHET: Well, we provided our experts with 8 many things to review. We didn't, unlike Dr. Holford, give 9 him 19 documents that were all favorable to 3M's case. 10 actually gave our experts a very wide volume of materials. 11 THE COURT: So what does that all mean? No, 12 nobody actually talked about this jump? 13 MR. SACCHET: Well, Dr. Holford said that, yeah, 14 there's a spike in DGI rates, and that showed that rates 15 were out of control. But he does that based on splicing the 16 time period into different quarters, and then even go so far 17 as to say if you bring it down to two months, the rate of 18 infection is eight percent whereas the rate reported in the 19 McGovern study is three percent, so we can see that there 20 was a five percent increase. 21 What I would say in response to that is there's no 22 scientific methodology or proof that when you go from eight 23 percent to a two-month period or to three percent to five 24 percent in a different period that that shows that there was 25 confounding by an antithrombotic.

1 Moreover, 3M has produced a document in this very 2 litigation that we cited in our papers that was constructed 3 by their 30(b)(6) witness Mr. Al van Duren that shows that 4 the DGI rates among U.S. hospitals oscillates between 5 5 percent and 7.5 percent, which is almost exactly the same 6 percent of even that spike in the McGovern study. So to 7 suggest that there was an out of control time period in the 8 McGovern study that somehow would show up confounding is 9 belied by the very graph that 3M 30(b)(6) witness prepared 10 in this case. 11 THE COURT: Okay. 12 JUDGE LEARY: Well, then why not show the spike in 13 the graph that was published? 14 MR. SACCHET: So the authors chose to show an 15 average rate of infection as opposed to a --16 JUDGE LEARY: Why is that any more meaningful than 17 actually showing the rate of incidents? 18 MR. SACCHET: So my view on the subject matter 19 would be in Table 2, in order to determine whether there is 20 a significant difference in infection. 21 JUDGE LEARY: I'm not interested in your 22 interpretation. What do Reed, Albrecht, Nachtsheim -- what 23 do any of the authors say about why it was represented the 24 way it was in the published article as opposed to the way it 25 was graphed in the preliminary document?

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                 MR. SACCHET: I don't recall specific testimony on
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       that question.
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                 JUDGE LEARY: It had to be done for some reason,
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       and I'm trying to understand whether or not there was some
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       scientific justification that would have made that graph
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       that was published a better representation or more valuable
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       representation than the actual data.
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                 MR. SACCHET: I could proffer.
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                 JUDGE LEARY: No, I'm not interested, nobody's
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       commented. The authors of the article have not commented in
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       terms of why the graph was depicted the way it was when it
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       was finally published.
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                 MR. SACCHET: All I know is that the Professor
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       Nachtsheim, the professor at the University of Minnesota,
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       analyzed that graph and worked with Mr. Albrecht and said
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       that it should be better portrayed as an average as opposed
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       to a moving average. I do know that.
                 JUDGE LEARY: That's in the record.
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                 MR. SACCHET: It may not be in the record that
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       we've submitted because --
                 JUDGE LEARY: That's all I'm interested in because
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       that's all we have to go on.
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                 MR. SACCHET: So I'm representing that when I took
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                 JUDGE LEARY: I'm not interested in what you
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       represent.
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                 MR. SACCHET: When I took Professor Nachtsheim's
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       deposition.
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                 JUDGE LEARY: Okay, if that's part of the record,
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       go ahead.
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                 MR. SACCHET: And the documents that were part of
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       that deposition reflect that Professor Nachtsheim preferred
       to have an average as opposed to what --
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                 JUDGE LEARY: This is what he testified to?
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                 MR. SACCHET: Yes.
                 JUDGE LEARY: Okay.
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                 MR. SACCHET: If questions are finished on that
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       particular topic, I can move into I believe I've touched on
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       the issue of confounding with respect to the
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       thromboprophylaxis.
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                 I do want to just note for the Court, I'd like to
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       briefly talk about Professor Holford's testimony regarding
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       the change in start date, which is also one of the topics
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       that came up this morning with respect to the study itself.
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                 The time period of the McGovern study occurred
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       from July 1st, 2008, and it ended on January 1st, 2011,
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       approximately a 2.5-year time period. Professor Holford
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       constructed a different analysis in which he said, well, you
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       could have improved the power of the study, and you could
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       have expanded the time period instead of starting on
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July 1st, moving the date back nine months to October 1st of 2007. And when you do that, there's a nonsignificant difference in deep joint infections when that data is included.

Professor Holford's argument depends on the reliability of Albrecht Exhibit 10. That's the source of the data in which he conducted his pre-McGovern study analysis. Professor Holford already admitted on the record that Exhibit 10 was incomplete. And, indeed, the authors of the McGovern study testified to the same fact.

Dr. Reed, unlike any of the other authors of the McGovern study, was the only one in charge of collecting the data. Mr. Albrecht wasn't in charge of collecting the data. Not even Dr. McGovern was in charge of collecting the data. Dr. Reed said on the record that that was his responsibility, and he worked with a team of nurses at Wansbeck Hospital to gather that data.

What Dr. Reed also said on the record is that full surveillance did not start until July 1st, 2008. The exact same date of the McGovern study. When I cross examined Professor Holford on that issue, I said, do you have any reason to doubt Dr. Reed's testimony? No.

Dr. Reed also testified that if one were to rely on data prior to July 1st, 2008, "it would be very unreliable because it was incomplete because they did not

have full-time surveillance, and there would be large gaps in the data set."

In this excerpt, Professor Holford agreed about this proposition. I asked, "So I just want to be clear, based on what you just said it's either possible that full surveillance began on July 1st, 2008, or perhaps even later January 1, 2009." To be honest, I don't know where he pulled that date out of but that's what he said.

And I said, "but you nonetheless constructed your model on data that was prior to that time?" "That's right." So Professor Holford admitted under oath that full surveillance didn't start until July 1st or perhaps even later, yet when he constructed his new start date analysis of fabricating the October 1st, 2007, date, he relied on data prior to the start date?

Dr. Holford, again, has published numerous articles in which he criticizes others and says so much about relying on complete data because to do otherwise would lead to a phenomena called data artifact. That just means unreliable analysis. That's exactly what he does here, and this excerpt proves that he relied on data that was not complete prior to the start date.

3M makes a couple counter-arguments citing an article by Sprowson and the unpublished transcripts, some of which you've seen. What I would like to make clear with

respect to the second argument is that in those manuscripts, the McGovern authors expanded the data set as much as they could based on complete data, as opposed to contracting it to contrive statistical significance.

In fact, as I've already mentioned, they did a post-publication analysis in which they expanded the data set even further and got the same exact results. So to suggest that the McGovern authors cherry picked a start date in order to achieve that result is belied by the fact that they tried to have as much full data as they could and they expanded the time line accordingly.

I asked Dr. McGovern a question point blank, was there any attempt to cherry pick data? Did you try to start this start date at a particular time to achieve that? Do you have any idea of any of that happening? And he said, no, all we tried to do is collect as much as we could as long as it was complete. And Dr. Reed testified to that same fact.

THE COURT: Okay. In view of time, I just wonder if you'd be able to wrap up your comments.

MR. SACCHET: Of course. It would be helpful from Your Honors if I could know in trying to wrap up, there are two topics I really, really would like to mention which deals with potential confounding from antithrombotic and the double control that Judge Noel had asked so much about in

attempting to make the odds ratio disappear.

THE COURT: Why don't you go to that because haven't you talked about the antithrombotics?

MR. SACCHET: If I said antithrombotics, I meant antibiotic. So antibiotics. Professor Holford curiously never actually says in his report that the antibiotic is a confounder, but what he did do is he included a calculation where he controlled for Bair Hugger patients by only looking at patients, only looking at Bair Hugger patients. And he compared Bair Hugger patients who received the first antibiotic, which is called Gentamicin, to the second antibiotic, which is called Gentamicin plus Teicoplanin.

The inference from Professor Holford's report and the arguments that are made today is that a change from Gentamicin was actually better and that the use of this dual antibiotic lead to decreased infection rates and, therefore, contributed to the drop in infection rates that the HotDog patients had the benefit of but only some of the Bair Hugger patients had the benefit of, if that makes sense.

Professor Holford's own calculation defies the entire theory. When he controlled for Bair Hugger patients, the risk of infection among those who received Gentamicin the first regime was 1.92 percent. The risk of infection among Bair Hugger patients who received the second regime, almost double, 3.13.

So when I saw this report, I really, I had a hard time getting my head around it because his own calculation disproves his own testimony and all of the arguments that 3M had made in this litigation as to the confounding from the antibiotics. So I asked Professor Holford, okay, so wait a second, so couldn't it actually be possible that there was reverse or negative confounding in that patients who received the HotDog and had the second type of antibiotic Gentamicin plus Teicoplanin actually had a worse antibiotic and therefore the odds ratio should even be higher than what was reported in the study? And he agreed. I asked him, so, if anything.

THE COURT: Okay. So now you're next point.

MR. SACCHET: Fair enough. The double control issue, which is one that's come up also. At the end of Professor Holford's report, he attempts to control for all potential confounding variables by only looking at Bair Hugger patients who received Gentamicin and Teicoplanin and Bair Hugger patients who received Tinzaparin, and then looking at HotDog patients who received the same exact protocol.

Now this is important. The McGovern study had over 1400 patients. When Holford controlled for all hypothetical confounding factors, the number dropped to less than half, 640. There were three deep joint infections out

of 270 Bair Hugger patients, and there were four deep joint infections out of 372 HotDog patients.

In this very case, 3M's 30(b)(6) witness, there is a document that we put in, it's on the record in which he testified that in order to have an adequately powered statistical calculation, you would need more than a thousand patients. Professor Holford's group is 640. He admitted on the record when I deposed him that he did not a rudimentary power analysis.

And, in fact, Mr. Albrecht who we've heard about 3M's implication that he agreed to the same fact that it disappears. He said the very exact same thing at his deposition but that's never been quoted by 3M. Although, Mr. Albrecht did acknowledge that the rate of infection would be very similar when you control for confounding factors, which is still an increase, although nominal, 1.11 percent DGI during the Bair Hugger period compared to 1.08 during the HotDog period, that he could not determine the meaningfulness of whether the odds ratio disappeared because the calculation was under-powered. There's not enough patients and that's proven by 3M's own corporate witness. It's vastly under-powered.

And to be honest, it's no surprise, if you have a small sample size, and you have a very low rate of infection in order to actually see if there's a meaningful difference,

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       you need a lot of patients, and that's the very reason that
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       3M has refused to conduct the randomized controlled trial.
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                 THE COURT: All right. Thank you.
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                 MR. SACCHET: Do you want to hear anything about
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       Dr. Borak?
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                 THE COURT: We really can't right now.
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                 MR. SACCHET: Okay. Fair enough.
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                 THE COURT: But you'll be back tomorrow, and we'll
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       consult and actually we'll give you a few minutes to talk
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       about Dr. Borak in the morning, but we have to be in recess
       now. And we'll come back tomorrow at 9:00 a.m.
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                 MR. SACCHET: Okay. Thank you.
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                 THE COURT: We're in recess.
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                     (Court adjourned at 4:26 p.m.).
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                I, Maria V. Weinbeck, certify that the foregoing is
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       a correct transcript from the record of proceedings in the
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       above-entitled matter.
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22
                     Certified by: <u>s/ Maria V. Weinbeck</u>
23
                                     Maria V. Weinbeck, RMR-FCRR
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